

2014

# MOB2030 – a place between solitude and collaboration

Xuan Liu

*Virginia Commonwealth University*

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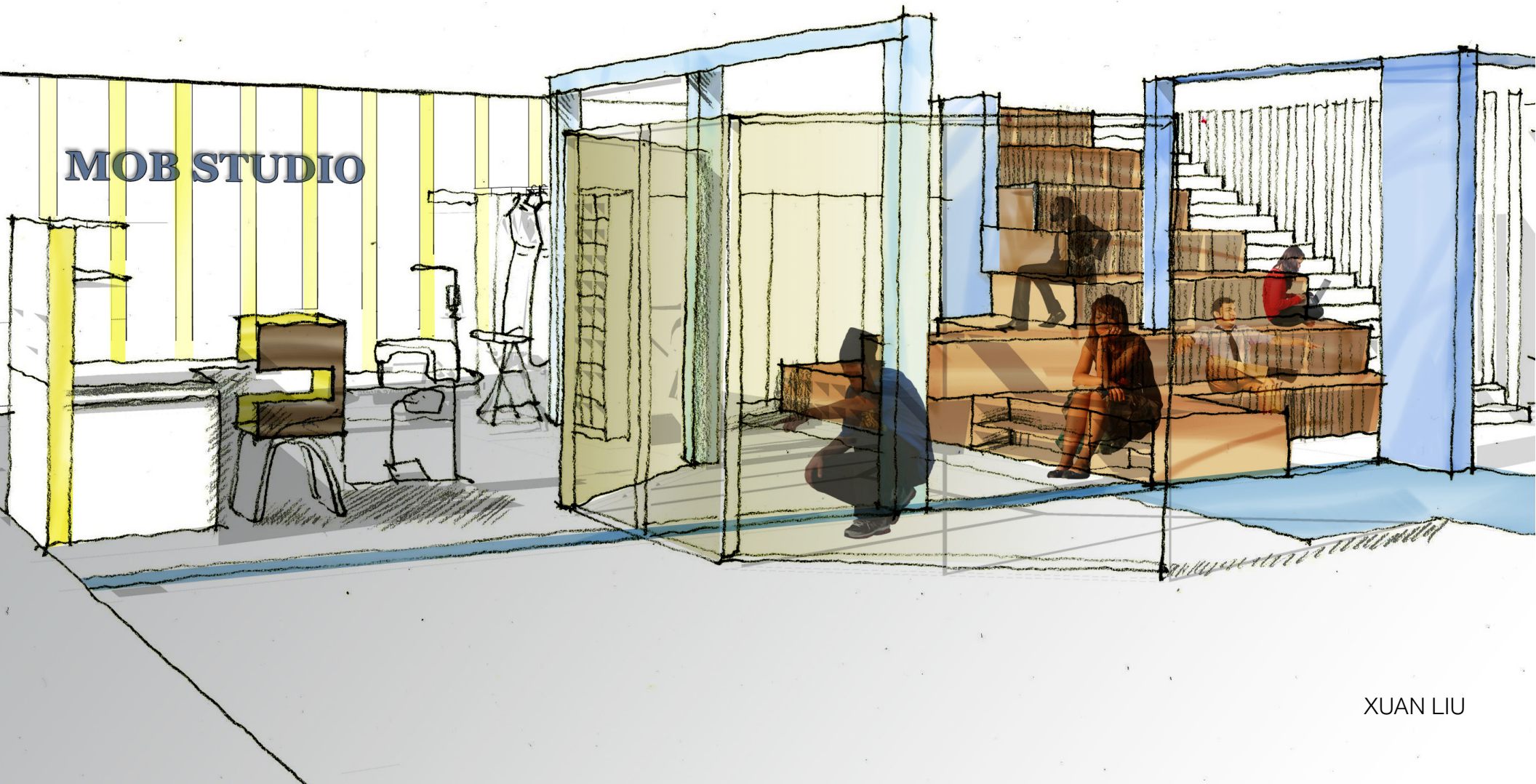
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MOB  
2030

A Place Between Solitude and Collaboration



XUAN LIU



A thesis submitted in partial fulfillment of the requirements for the degree of Master of Fine Arts at Virginia Commonwealth University

XUAN LIU

B.A. Environmental Art Design  
Beijing Institute of Technology 2012

B.M. Business Administration  
Beijing Institute of Technology 2012

M.F.A. Interior Environments Design  
Virginia Commonwealth University 2014

Camden Whitehead, Advisor, Associate Professor  
Department of Interior Design, School of the Arts

Emily Smith, Reader, Adjunct Professor  
Department of Interior Design, School of the Arts

Virginia Commonwealth University, Richmond, Virginia, May 2014

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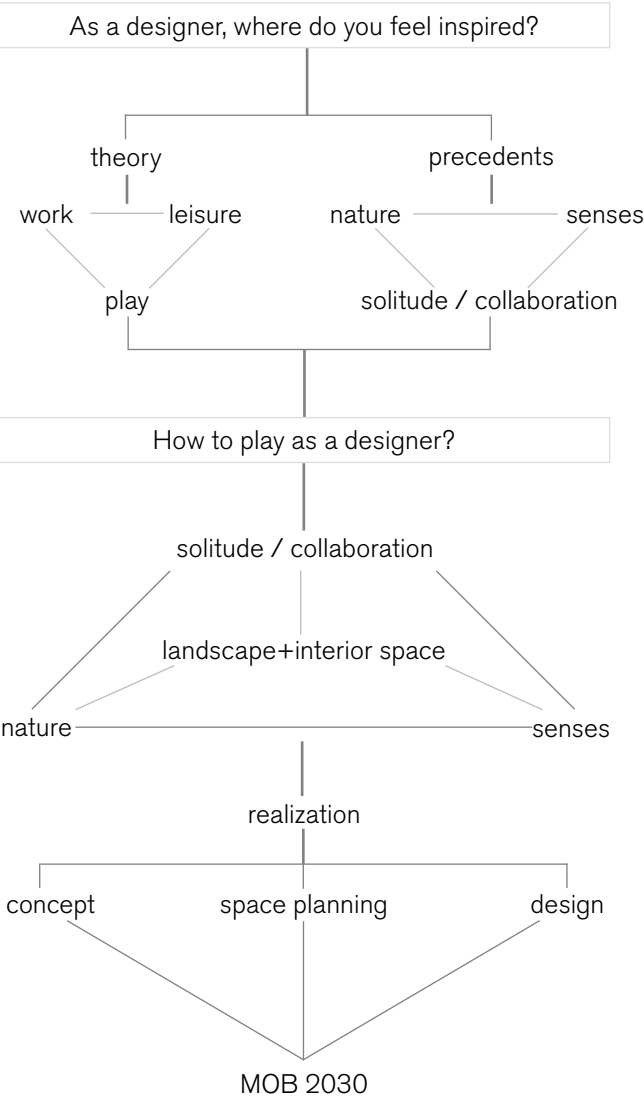
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abstract

The design of an experimental interdisciplinary design lab—MOB 2030—within a waterfront building in Richmond, Virginia, provides an opportunity for designers to find infinite inspirations. The tools of interior design are used to manipulate a wide range of functional and formal elements to define designers' relationship to space, work and nature. The final project provides three studios, three galleries, rooftop and waterfront landscapes, and collaboration steps connect other spaces together.

“research input”

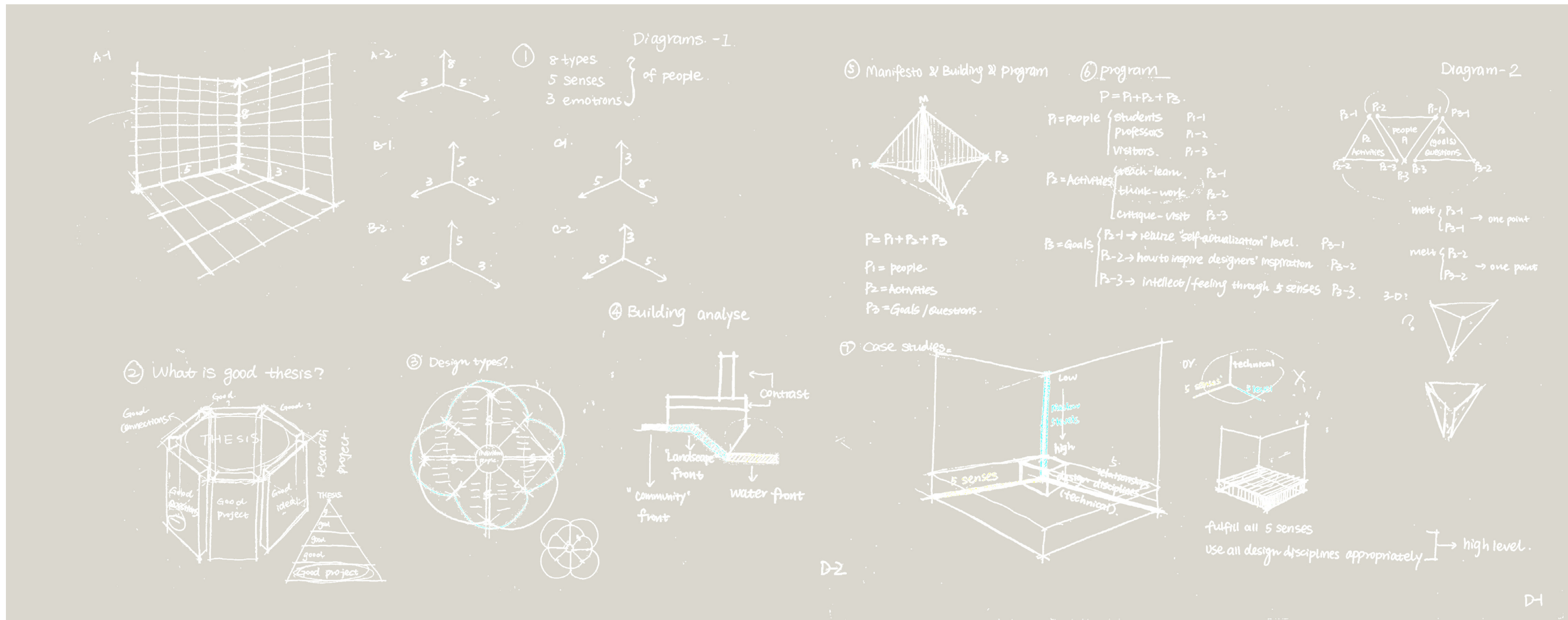


“result output”

design process



# 01. introduction



01

10

001

100

0001


1000

00001

10000


...

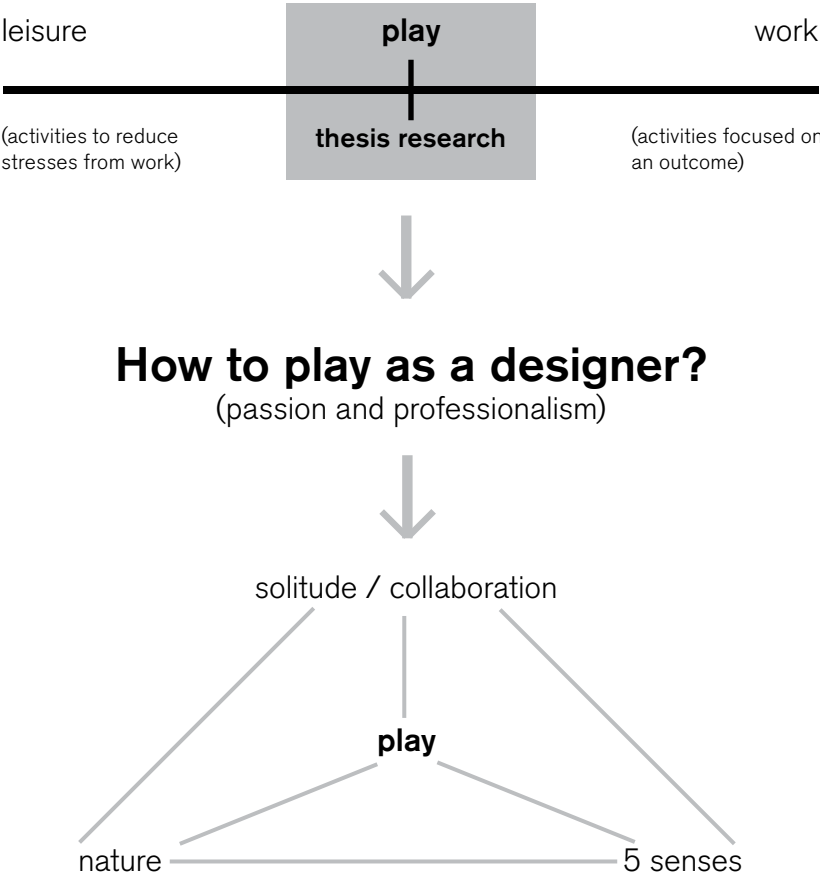
...

I believe,  
design is number 0,  
and life is number 1.

Zero is meaningless.  
But it adds endless value when it follows 1.

Zero is neither positive nor negative.  
So it helps life find its equilibrium.

Design follows Life.



As a design student, I have both the happy moments that yield great inspirations and the sad moments where I am stuck in problems.

Where do inspirations exist? Educator Mortimer Adler grouped human activity into three primary areas: work, or activities focused on an outcome; leisure, those activities that reduce stresses from work; and play, which he sees as a bridge between work and leisure. Play enriches desginers.

How designers play is the scope of my thesis research. For a designer, passion and professionalism are two equally important attributes referencing the rational and the intuitive. Without passion, professionalism makes a designer just an artisan. Without professionalism, passion makes a designer a daydreamer.

Play, therefore, is an activity that inspires designers to find passion and professionalism unexpectedly. My goal is to create a space that encourages those activities to happen naturally.

## thesis statement

How can design energize  
and inspire designers in  
their working space?

## concept statement

Maximize one element's  
opportunities to provide  
energy to designers.

## metaphor of the concept



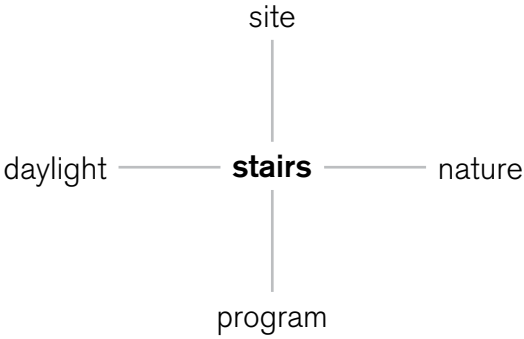
1.1 perpetual motion machine

A perpetual motion machine is a hypothetical machine which, once activated, would continue to function and produce work indefinitely with no input of energy.<sup>1</sup>

Although it is impossible to realize in scientific terms, can it be possible to work in a space that provides the users infinite energy?

The thesis explores potential design strategies that maximize one spatial element's opportunities to serve as a perpetual motion machine to energize and inspire designers in their working space.





strategies

In order to realize the goal of the thesis – how work space can provide designers inspirations - the main strategy uses stairs as the primary spatial element and lets it work as a perpetual motion machine, providing designers infinite energy through its multiple functions.

Four sub-strategies support the main strategy. The first one is the site location, Rockett's Landing, a community with close proximity to downtown Richmond and its restaurants, offices and residential areas. The second is the relationship between building and nature. The building has beautiful views of the downtown skyline and the James River. Third is the program, a space is for designers to work, think and engage. The last one considers daylight as the main lighting source in the space.

SPACE \ PEOPLE	interior designer	fashion designer	graphic designer
studios 1250 sq ft	draw, read, think, relax, daydream, make clothes, make models, photograph		
	400 sq ft	450 sq ft	400sq ft
collaboration 3900 sq ft	sit, talk, meet, eat, critique, informal studio, informal gallery		
galleries 3500 sq ft	formal exhibition		
	1000 sq ft	1500 sq ft	1000 sq ft
serving space 4350sq ft	bathroom - 500 sq ft office - 250 sq ft printing room - 230 sq ft meeting room - 220 sq ft lounge - 150 sq ft archive - 400 sq ft circulation - 2600 sq ft		
rooftop 3000 sq ft	relax		
waterfront 6600 sq ft	relax		
22,600 sq ft			

program

Formula:

3 design studios

3 design galleries

6 students

3 professors

1 staff

X visiting designers

Y clients

Z visitors

city

nature

= MOB 2030

program statement

MOB 2030 is a connector between design school and the real world.

By providing recent graduates the opportunity to be a part of a real world community before they enter industry, the space is a transitional school. Faculty, alumni, peers, visiting designers and clients come here to work with recent graduates and help them grow and find their career paths.

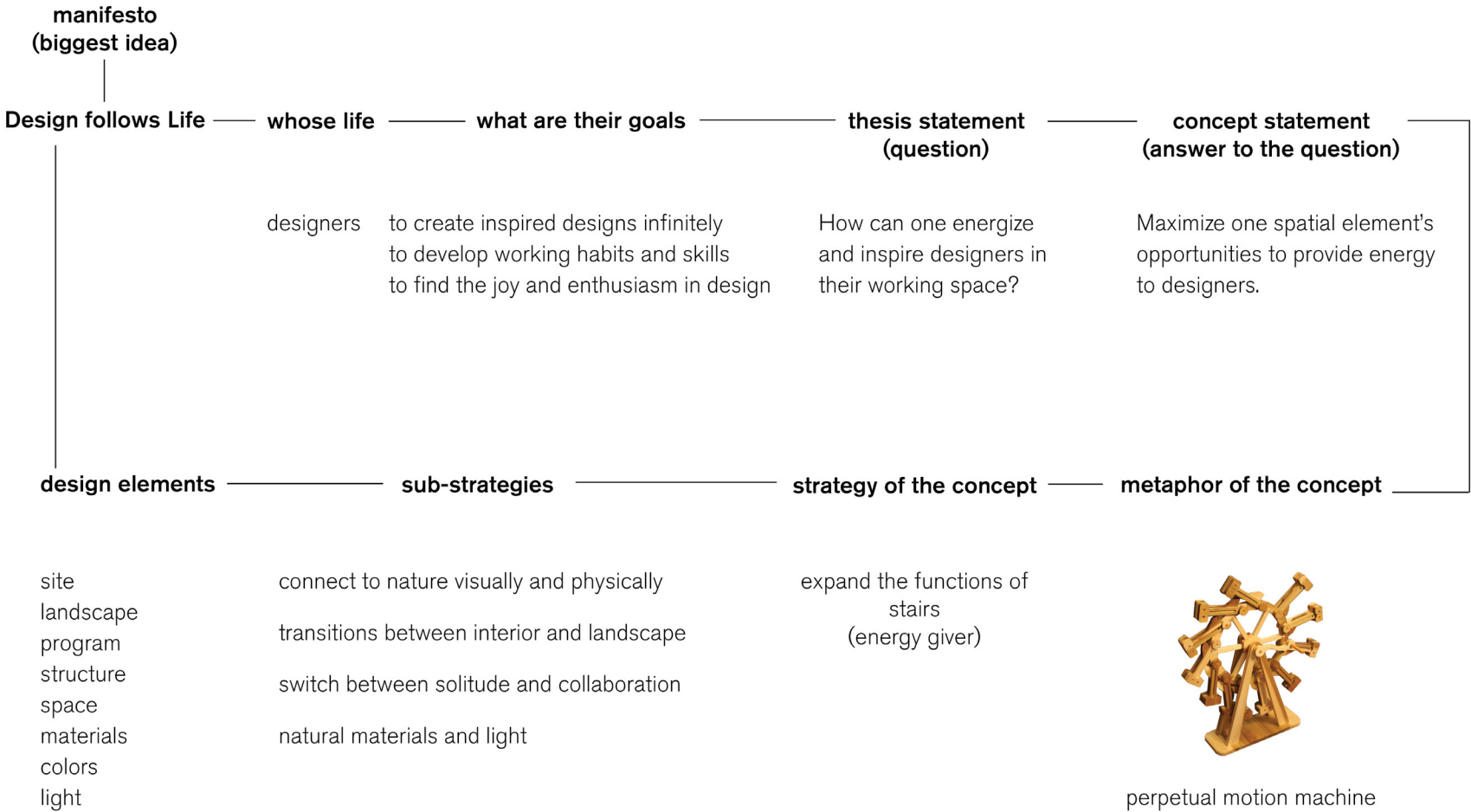
MOB 2030 is a connector between solitude and collaboration.

“One can be instructed in society, one is inspired only in solitude,” said Goethe. Solitude is the source of many inspirations. Designers here always can find a solitary corner to work individually or they can join in a group to share ideas. It is a place for thinking, working, making, engaging, connecting and sharing.

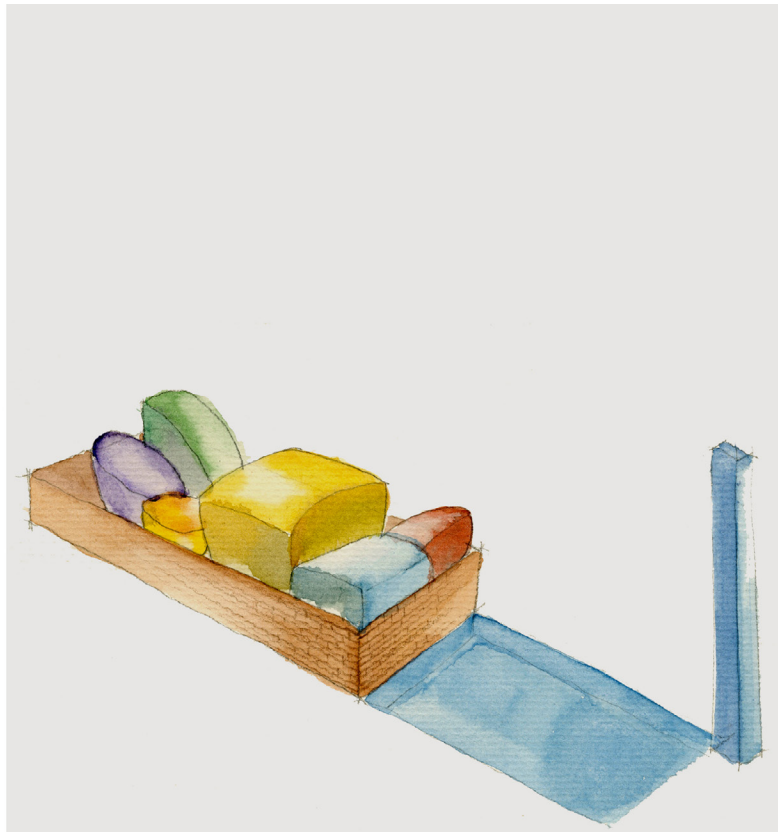
MOB 2030 is a connector between people and nature.

Located in Rockett’s Landing, facing the James River and overlooking the beautiful views of the downtown skyline, it inspires designers in a more creative way because what nature delivers to designers is never stale. “Art is born of the observation and investigation of nature,” said Cicero.

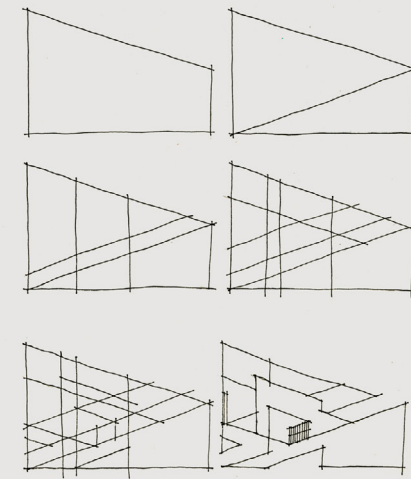
summary of introduction



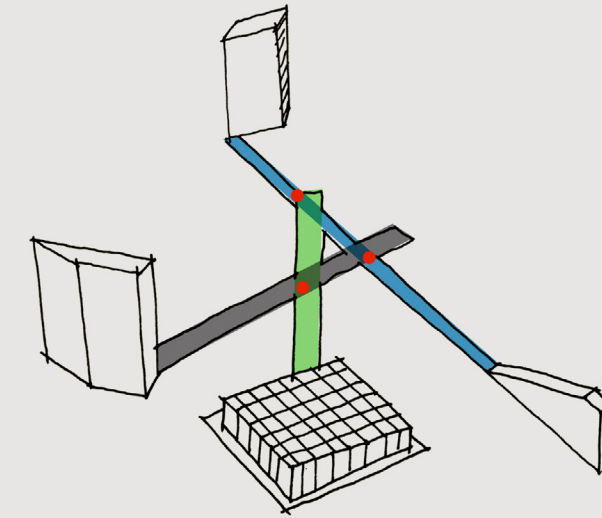
## 02. precedents



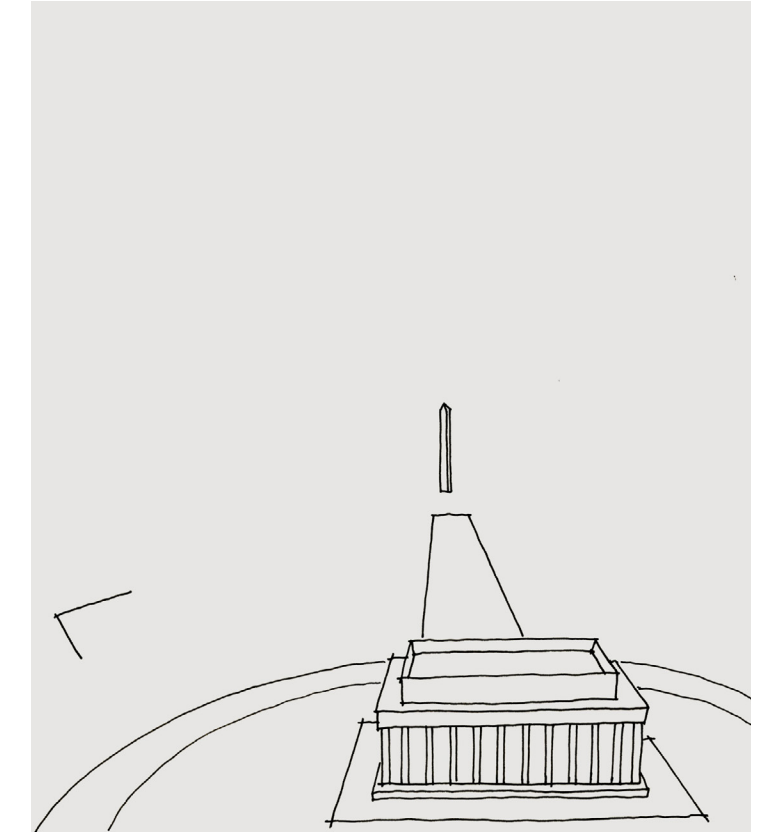
Chapel of St. Ignatius  
Steven Holl



National Gallery of Art East Wing  
I.M. Pei



Jewish Museum Berlin  
Daniel Libeskind



Vietnam Veterans Memorial Wall  
Maya Lin



# Chapel of St. Ignatius

Steven Holl  
Seattle, WA, USA  
1994 – 1997  
Chapel



2.1

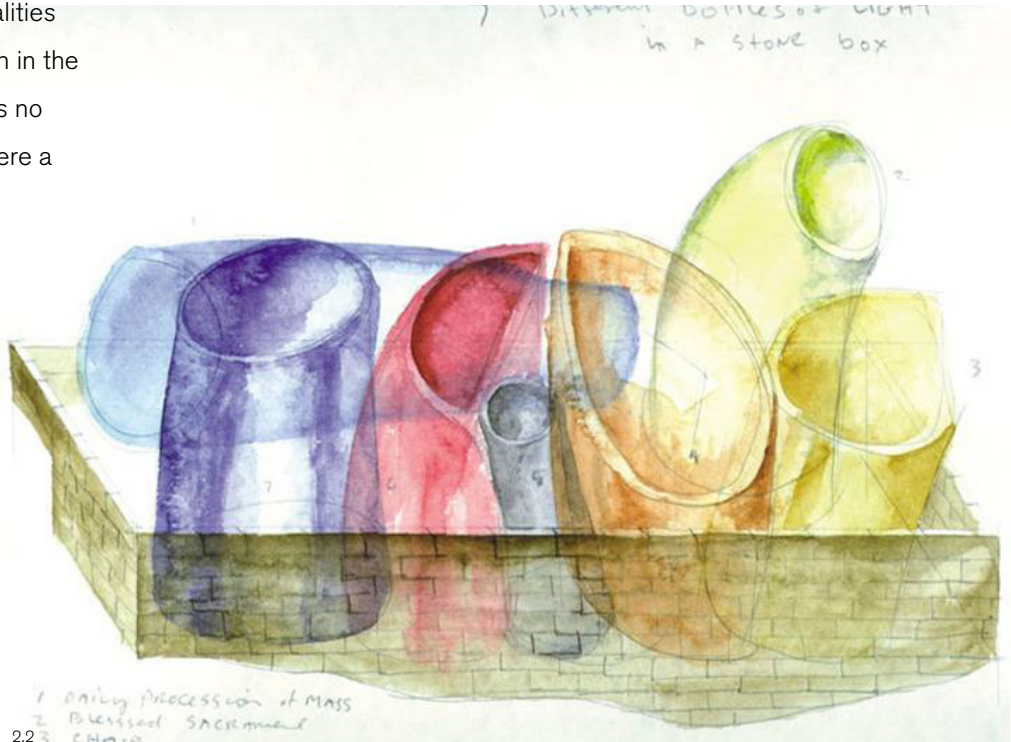
## lessons learned:

concept  
structure  
program  
geometry  
light

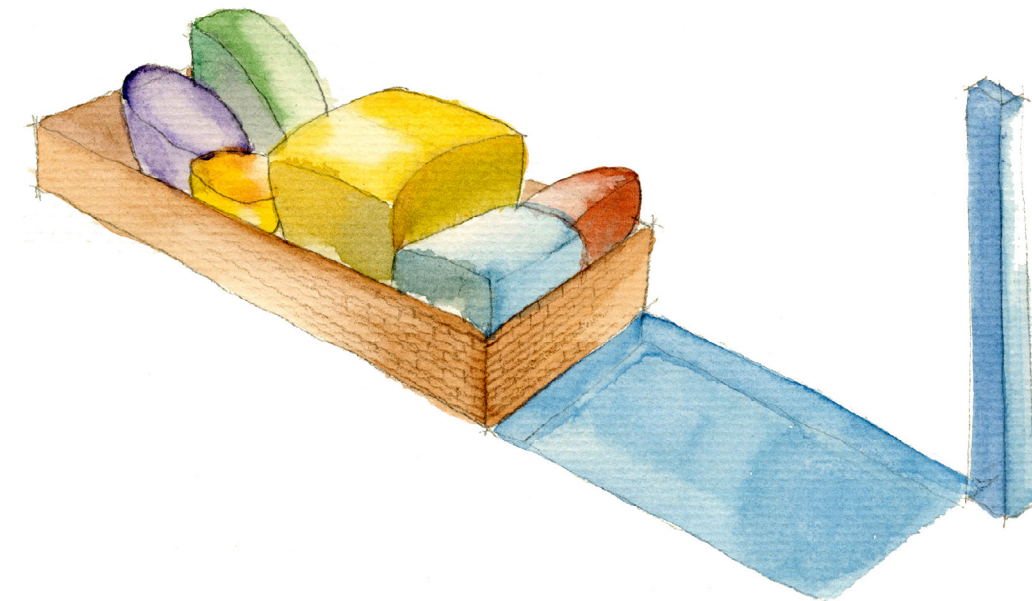
“For me, the excitement in architecture revolves around the idea and the phenomenon of the experience of that idea.”<sup>2</sup>  
—Steven Holl

Q:  
What is the project's concept?

A:  
“Seven bottles of light in a stone box” becomes the driving force of the design of the form. “The metaphor of light is shaped in different volumes emerging from the roof whose irregularities aim at different qualities of light. The concept, a gathering of different lights, can be seen in the concept of sketch of bottles emerging from a stone box. Just as no single method is prescribed in the Jesuit's spiritual exercises, here a unity of differences is gathered into one.”<sup>3</sup>—Steven Holl



## structure



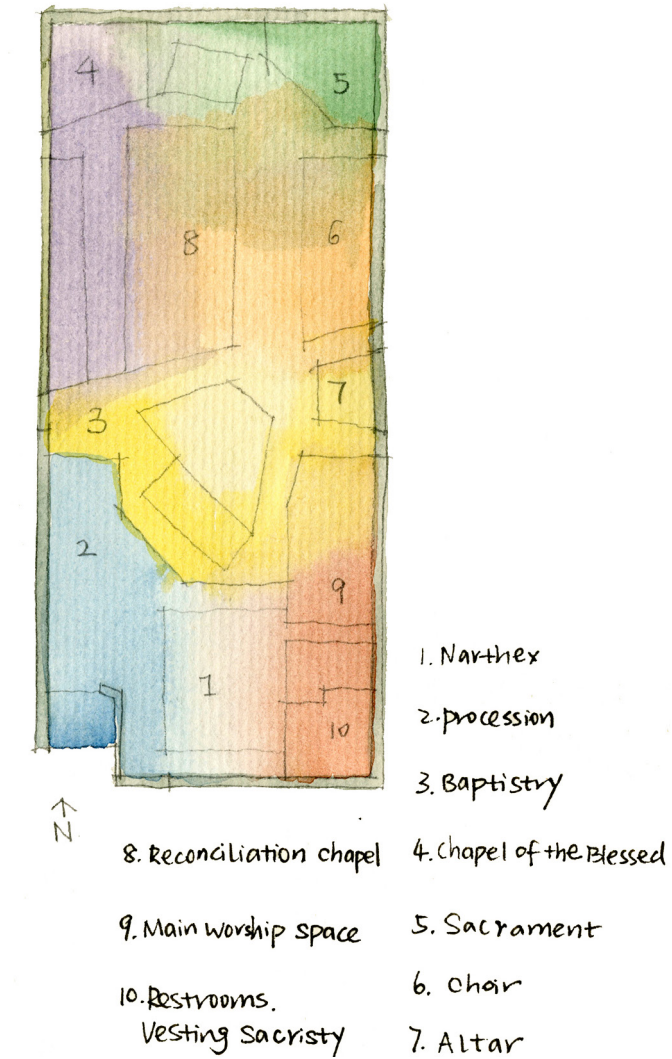
Q:

How did the concept influence the building design?

A:

The concept forms the parti of the building. The building takes the form of irregular skylights erupting from a rectangular building comprised of tilt-up concrete slab walls. This rectangular part forms the stone box while the skylights and bell-tower form the seven bottles.

## program



Q:

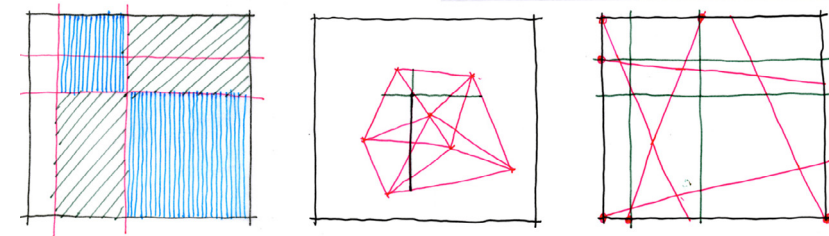
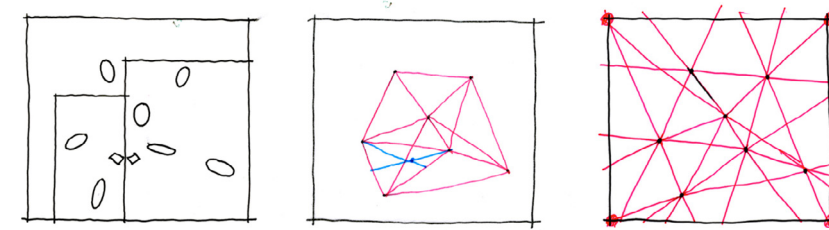
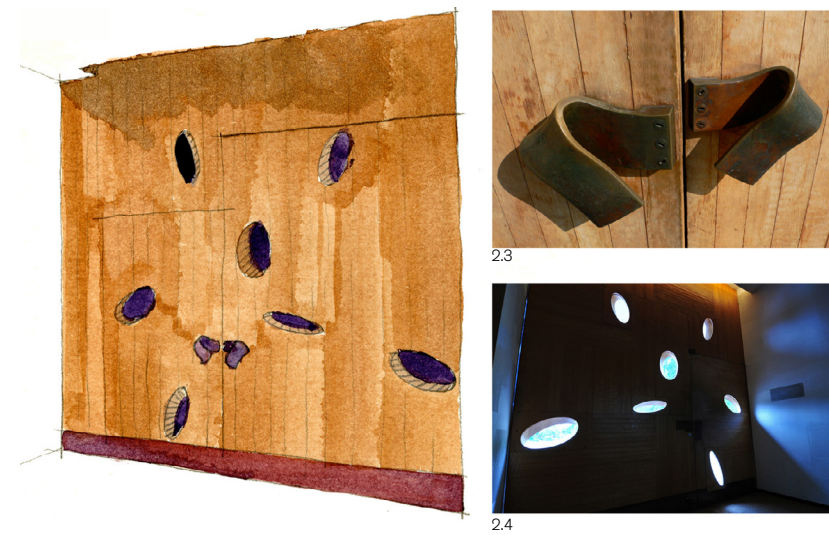
How did the program respond to the concept?

A:

The concept could be reflected in details of this program. The seven boxes imply the different stages in formal Jesuit services: the narthex, the processional, the main gathering space, the reconciliation chapel, the choir, the chapel of the Blessed Sacrament, and the bell tower.

The spirit of architectural design is expressed clearly through the conceptual schematization of "seven bottles of light in a stone box," where each bottle, according to the architect, is corresponding to various parts of Jesuit rituals.





## geometry

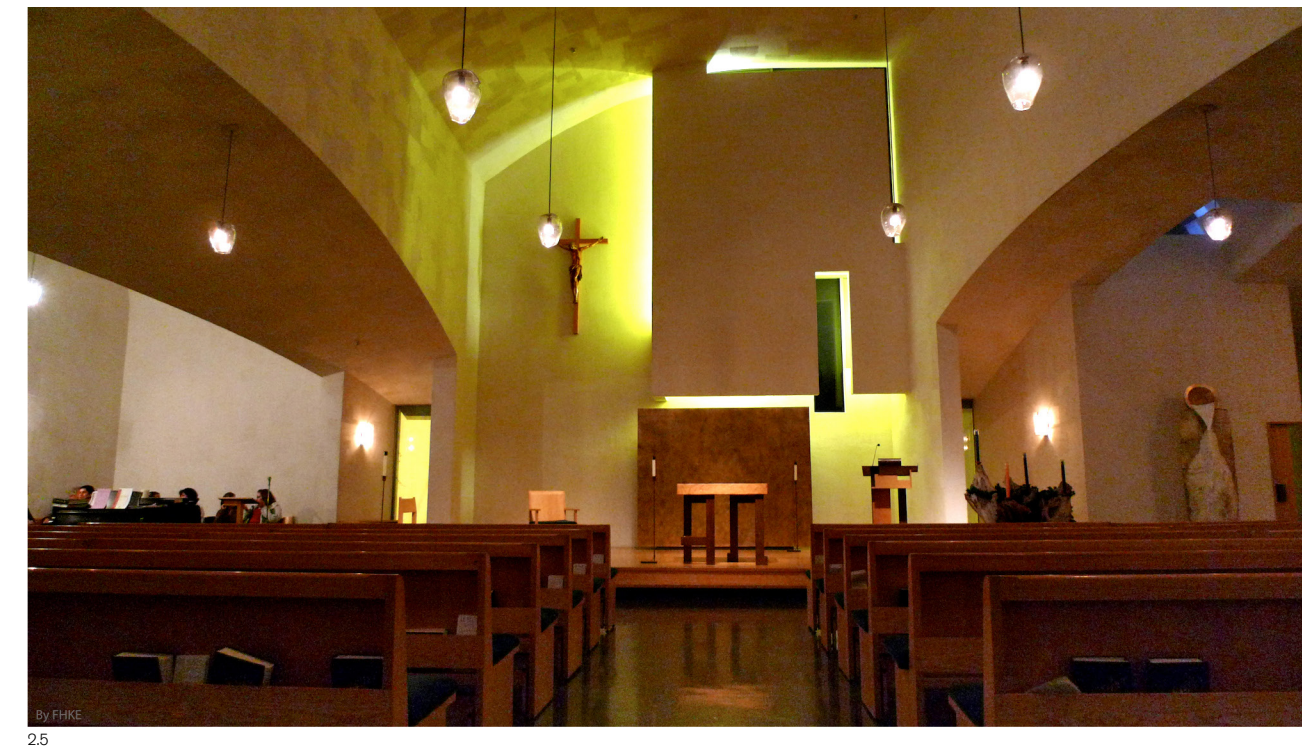
Q:

How did Holl use geometry and light on a detail design?

A:

Geometry and light are two key elements to cooperate together in Holl's projects to build up a stylish mixture of light and darkness, both inside and outside.

The door of the chapel illustrates the beauty of geometry and the use of light. During the day, the inside is transfused with the sunlight through holes with angled lenses. These holes also create a sense of permeability, attracting visitors' attention.



2.5

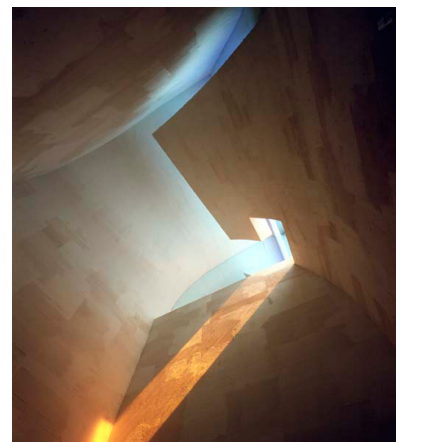
Q:

How did Holl use light to create interior spaces?

A:

In his buildings, natural light is penetrated into interior spaces, usually not directly, but through distinctively designed architectural details, in order to create the effect of light reflections.

## light



2.6



2.7

Holl thinks of light as a material like plywood or concrete. The lights of the interior are made up of a stained glass window and light reflected on a colored wall, which shapes the light a fusion of the natural and artificial elements, so that the inside light could be slightly different from time to time. In Holl's experimentation of its phenomenal qualities, light is a concept out of space, and a sense of spatial depth is brought into presence.



# National Gallery of Art East Wing

I.M.Pei

Washington, DC, USA

1974-1978

Art Museum

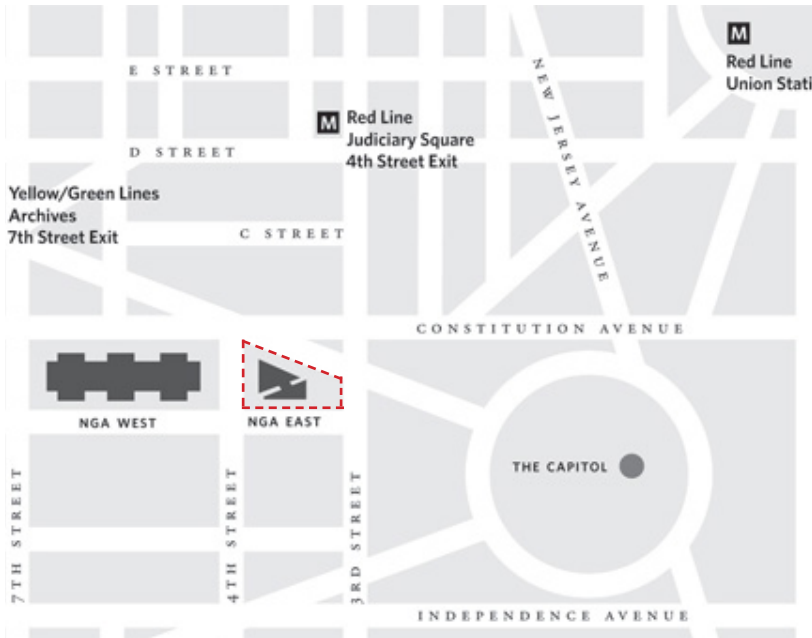
lessons learned:

context

space planning

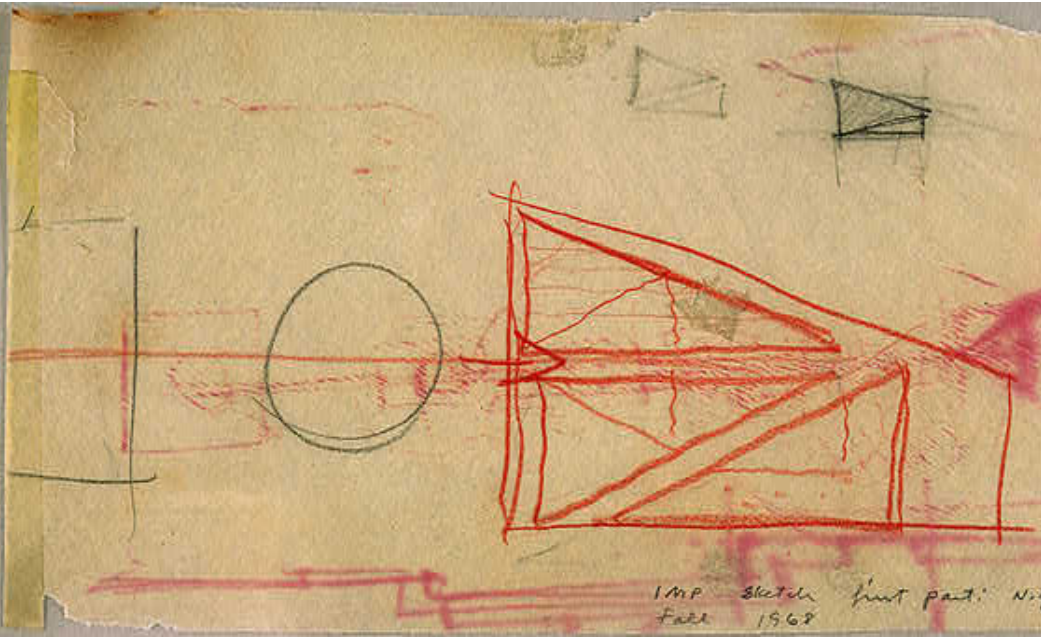
nature

light



28

“My analytical approach requires a full understanding of the three essential elements—time, place, purpose to arrive at an ideal balance.”<sup>4</sup>  
—I.M.Pei



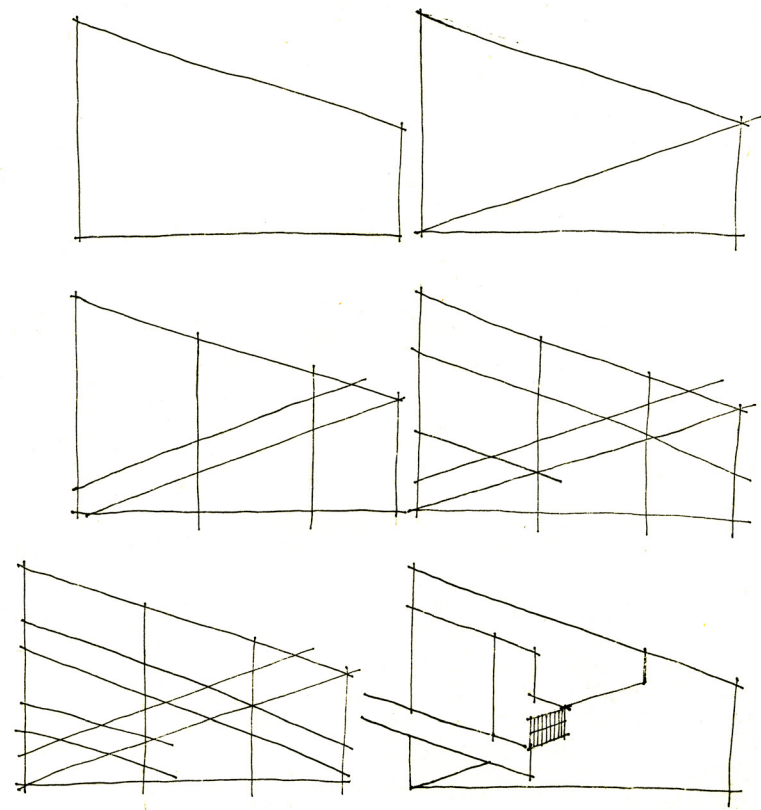
29 I. M. Pei. Early conceptual sketch for building plan, fall 1968.Crayon and graphite on tracing paper

Q:  
How did Pei start to work on a project?

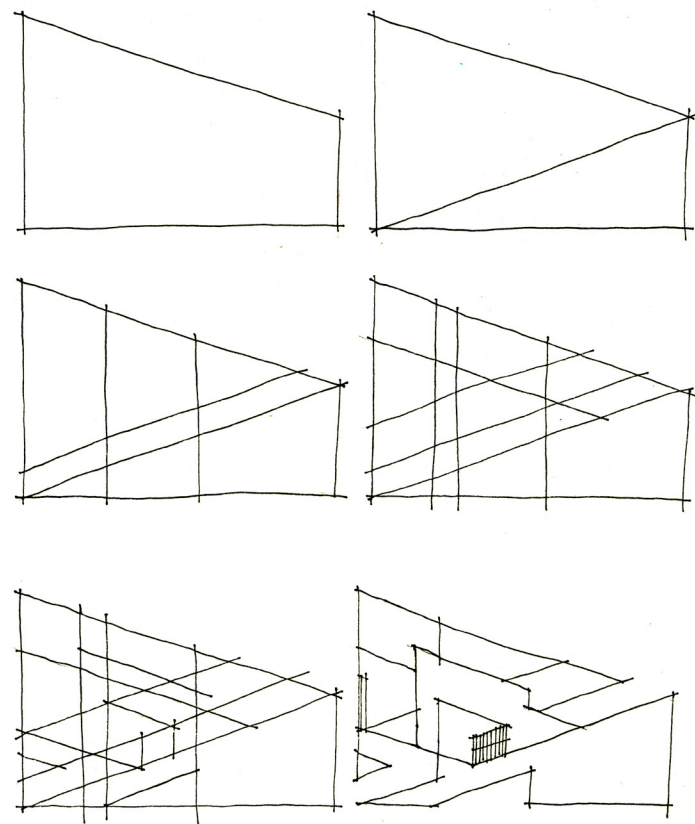
A:  
In a moment of insight, I. M. Pei solved the problem of the irregularity of a place by cutting it into an isosceles triangle and a smaller right triangle.

The West Building is represented by the lines to the left of the drawing, with the arrow showing its strong east-west axis.

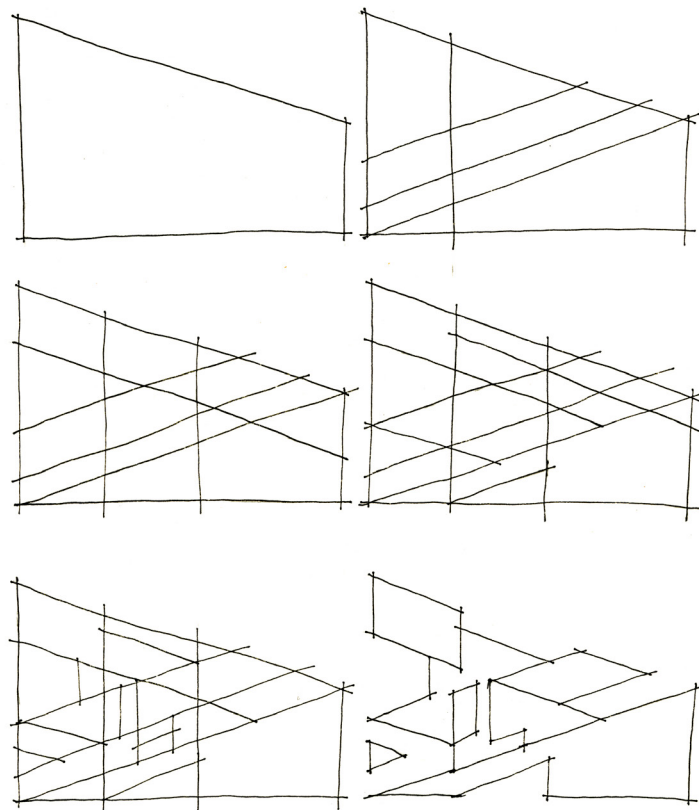
He later recalled, “I sketched a trapezoid on the back of an envelope. I drew a diagonal line across the trapezoid and produced two triangles. That was the beginning.”<sup>5</sup>



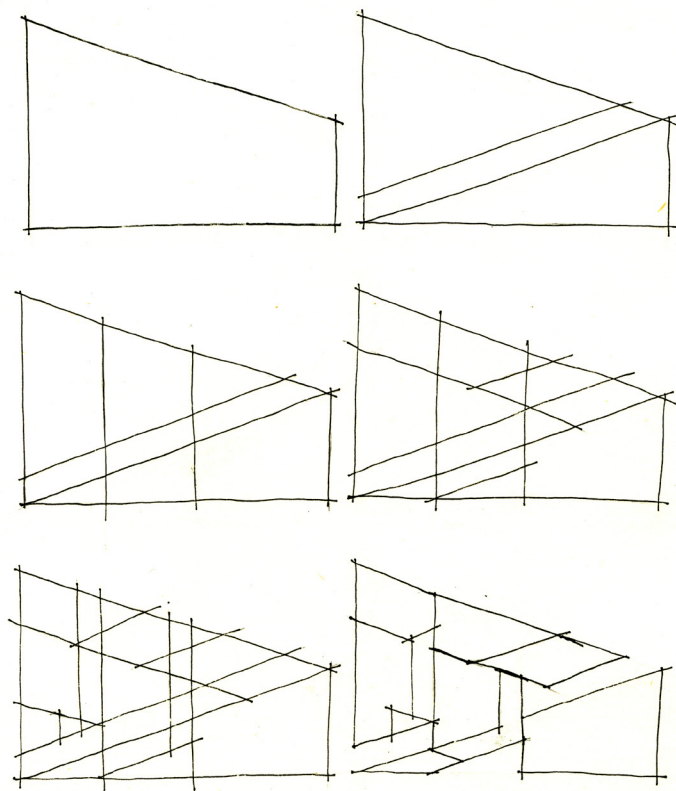
Concourse



Ground Level



Mezzanine



Upper Level



nature



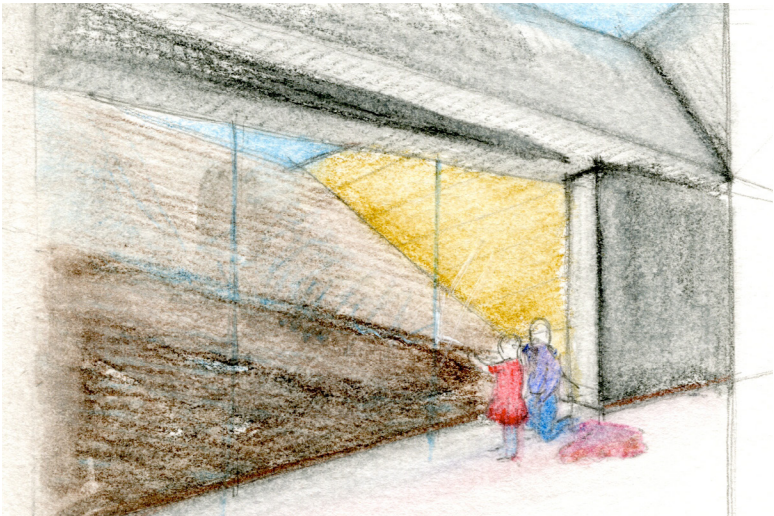
2.10

Q:  
How did Pei introduce the element of nature to the interior space?

A:  
A glass wall is employed to invite a sight of waterfall that descends from the courtyard. While what we could see outside is a series of glass pyramids with various sizes, harmonized with the water features, inside the functional center, visitors use the moving walkway through a long tunnel under the street into the splendid place of the atrium.



2.11



2.12



2.13

light

Q:  
How did Pei use natural light and artificial light to create different spaces?

A:  
Rather than the often used concrete ceiling, the skylight is designed for inviting the natural light into the building. Meanwhile, the triangular geometry is introduced in the creation: a sculptural structure composed of steel-framed modules having the same 2:3 ratio found in the building. Natural light and high ceiling atrium created a bright and welcoming space for visitors.

To connect the old and new buildings, Pei designed a long tunnel under a courtyard and the street between the two buildings. The work features have 41,000 computer-programmed LED nodes that run through channels along the 200-foot-long space. LEDs and low ceiling tunnel created a mysterious atmosphere for visitors.

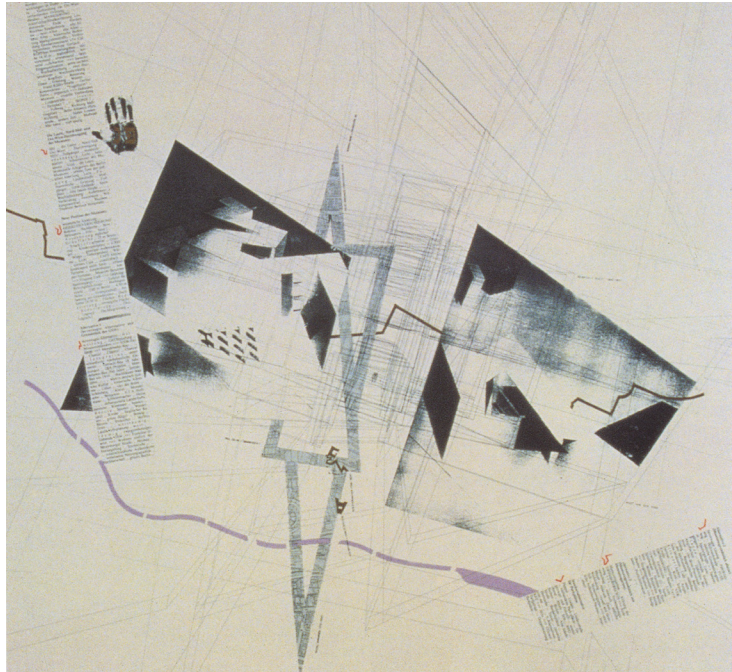


# Jewish Museum Berlin

Daniel Libeskind  
Berlin, Germany  
1992-1999  
Museum

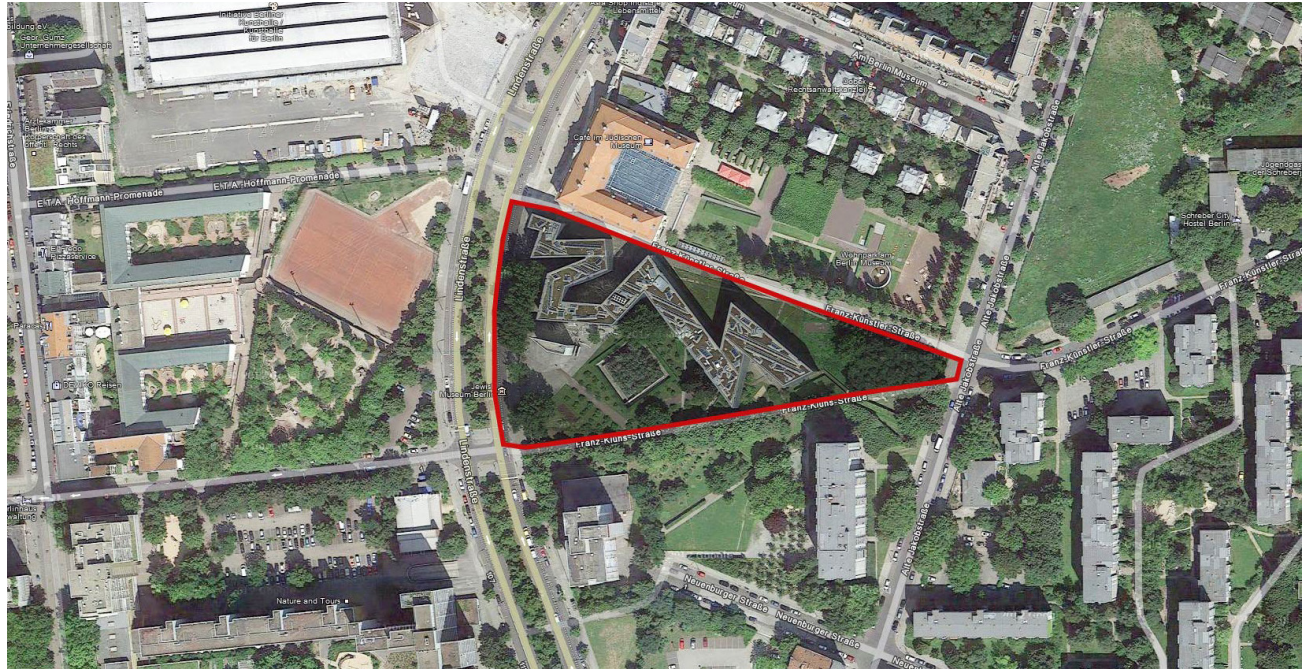
lessons learned:

context  
program  
structure  
nature  
senses

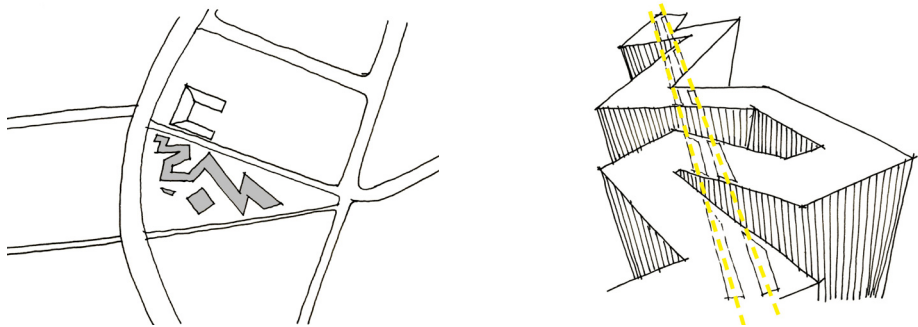


2.14

“To provide meaningful architecture is not to parody history but to articulate it.”<sup>6</sup>  
—Daniel Libeskind



2.15



## context

Q:  
How did the building respond to its context?

A:  
The building itself is a piece of art and it can speak out the history of the Jewish people in Germany.

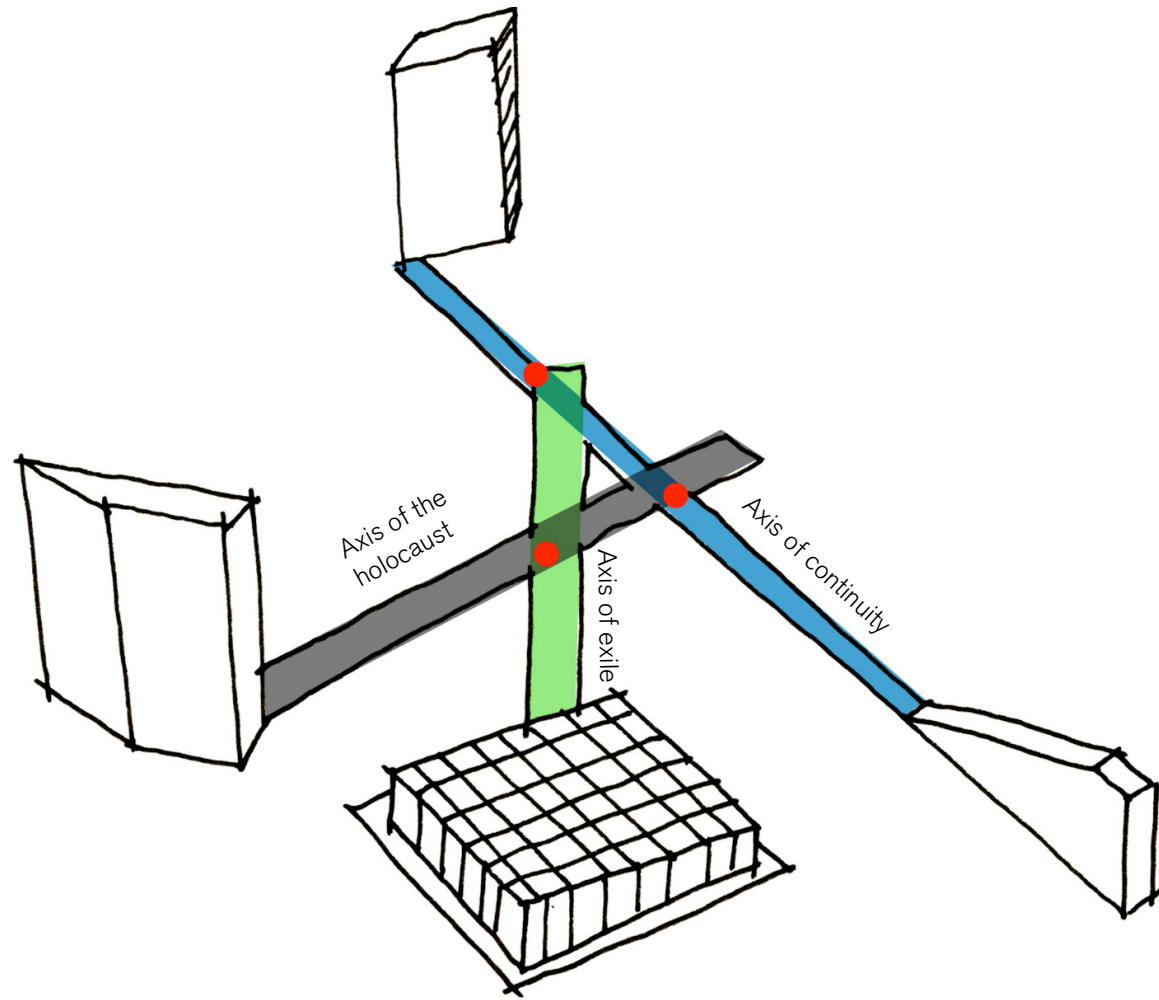
It is distinguished that the whole building could only be observed from the aerial view. In fact, the design is correspondingly matched with the feature of the site, which is long and pie shaped, connecting two streets.



## program

Q:  
How did Libeskind organize the program?

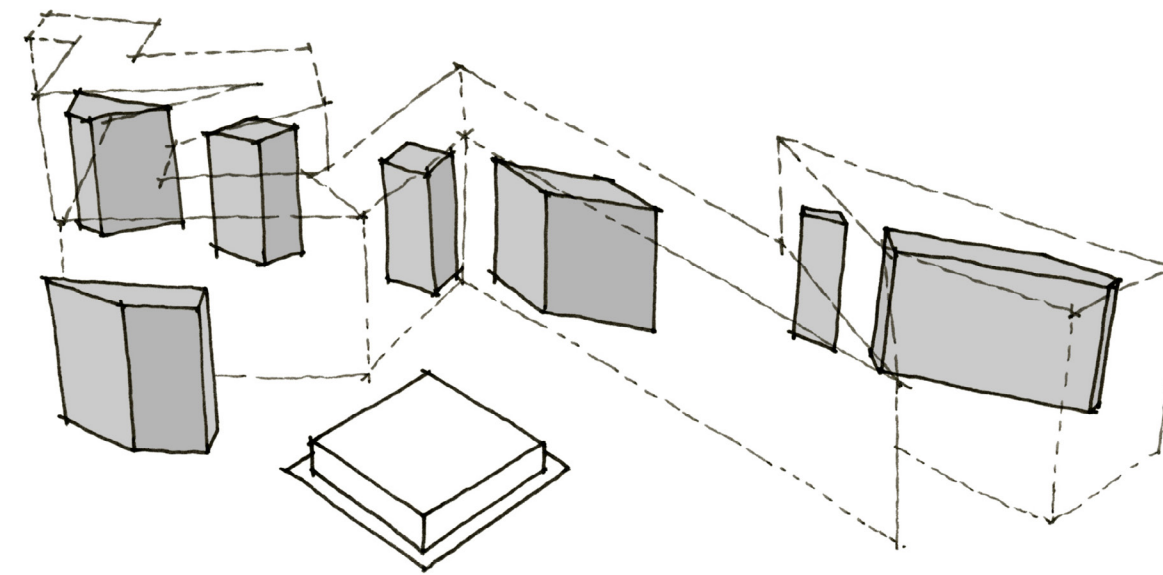
A:  
The whole program is composed of three underground routes that symbolize three different stories. The first as well as the longest route leads to the Stair of Continuity, which is going through the exhibition area of the museum, showing the developing line of the history. The second route brings visitors into the Garden of Exile and Emigration, recollecting the time when the people were forced to leave Berlin. The third one extends to a final end—the Holocaust Void.

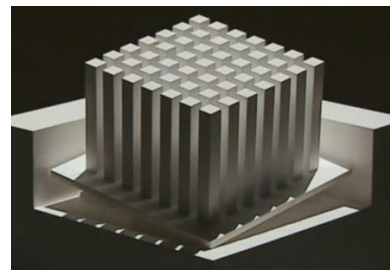
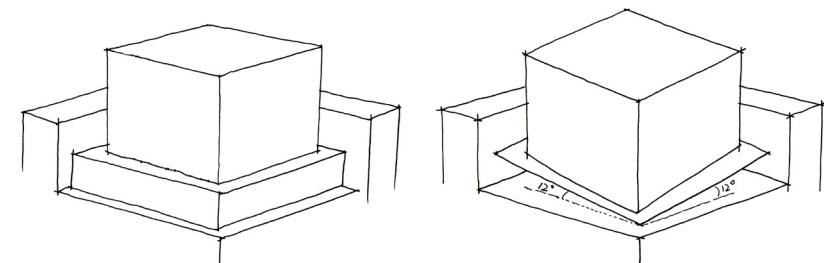


## structure

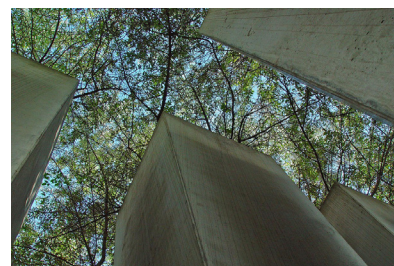
Q:  
How did Libeskind use structures to respond to the concept?

A:  
Libeskind has used the concepts of absence, emptiness and the invisible expressions of the disappearance of Jewish culture in the city to design the building. The void and the invisible are the structural features. The voids represent the central structural elements of the building and five voids run vertically through the new building.





2.16



2.17



2.18



2.19

Q:

How did Libeskind use objects and nature to represent design concept?

A:

In terms of the objects, forty-nine concrete columns rise out of the square, which makes the whole garden is on a 12° gradient and may make visitors lose the sense of direction, giving them a sense of the total instability and lack of orientation experienced by those driven out of Germany. In terms of nature, Russian willow oak planted on top of the pillars symbolizes hope.

nature



2.20

senses



2.21



2.22



2.23



2.24

Q:

How did Libeskind use space to interact with people's memories?

A:

The space is a point full of stories. More than 10,000 open-mouthed faces coarsely cut from heavy circular iron plates are spread on the floor of the "memory void". When visitors walk on the floor with the faces on it, they could feel the sound out of the metal sheets, as they clang and rattle against one another. The room is filled up with the echoes, which aroused the painful recollections of the innocent victims of war.

## Vietnam Veterans Memorial Wall

Maya Lin

Washington, D.C, USA

1982

Monument

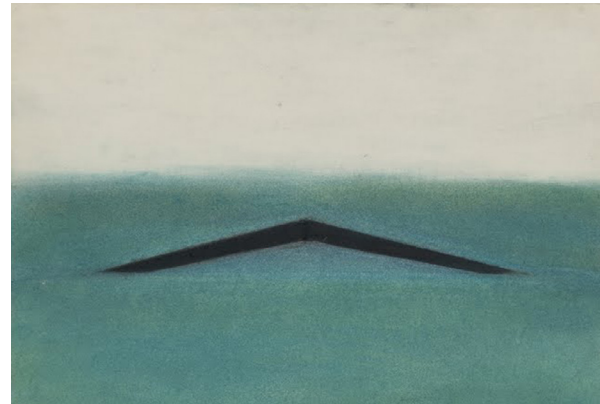
lessons learned:

context

senses

circulation

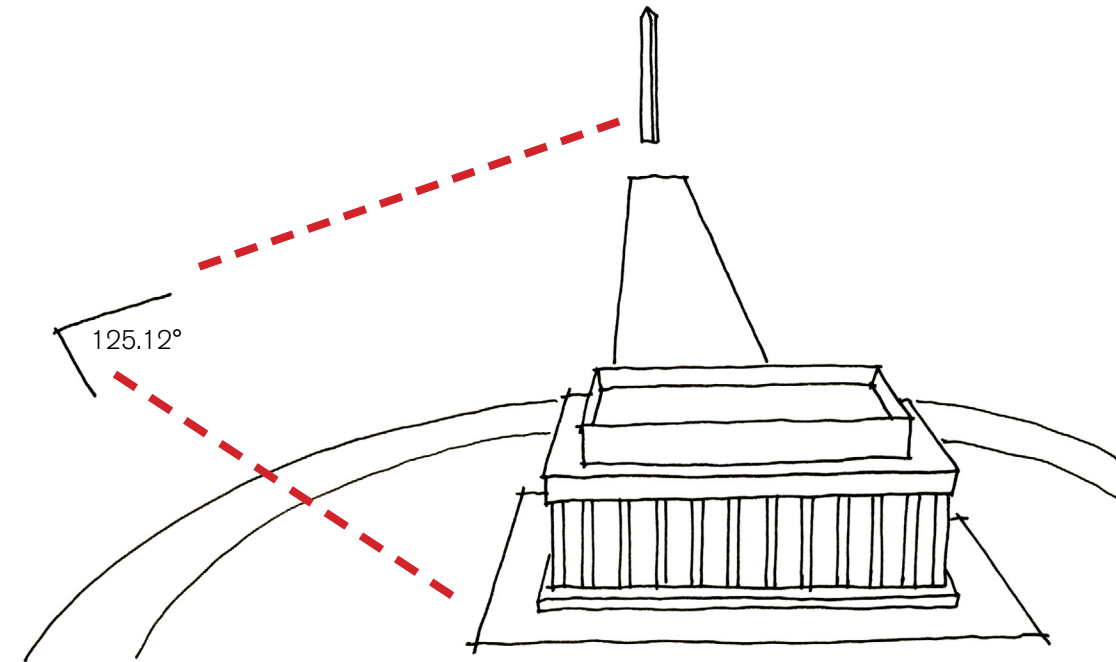
details



2.25

"I try to give people a different way of looking at their surroundings. That's art to me."<sup>7</sup>

—Maya Lin



## context

Q:

What is the relationship between the project and the site?

A:

The Wall is built in the shape of a chevron. Meeting at an angle of 125.12 degrees, both the east and west parts are 246 feet and 8 inches. Each corner of the Memorial points precisely to the northeast corners of the Washington Monument and the Lincoln Memorial.

"By linking these two strong symbols for the country, I wanted to create a unity between the nation's past and present"<sup>8</sup> said Maya Lin.



senses



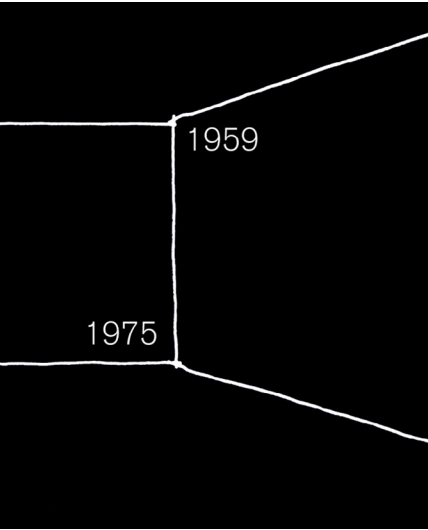
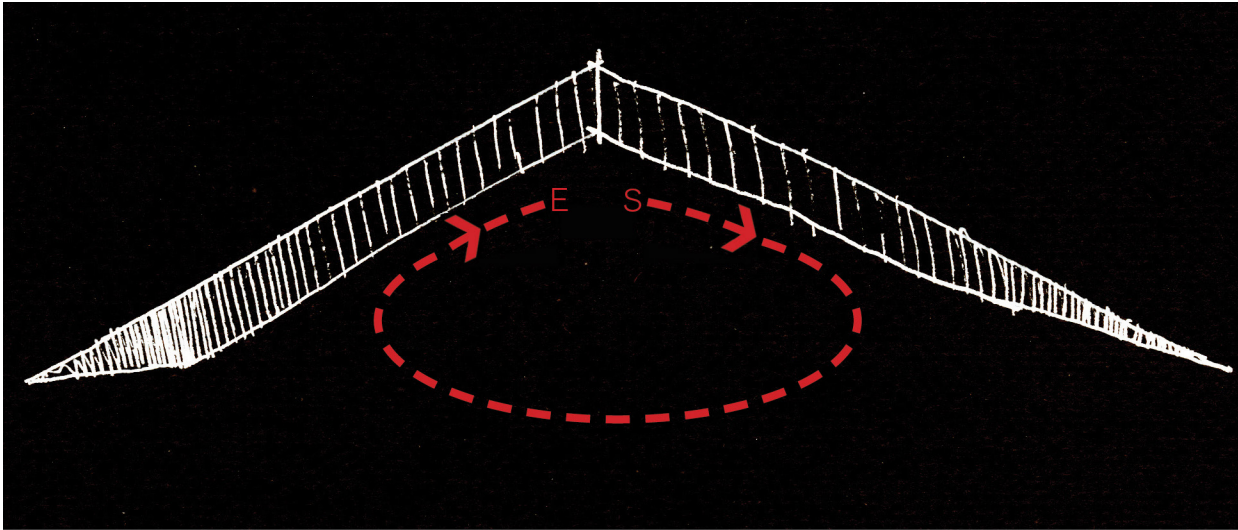
2.26

Q:  
What is the sense of the space?

A:  
Lin describes watching a group of ‘rowdy’ school children enter the memorial, and observes how their behavior changes: ‘They didn’t have any connection to the war specifically, but the minute they started walking into it, the teacher didn’t have to say anything, they just quieted down’.<sup>9</sup>

The power of the silence is out of the cloistered space that Lin created. It isolates people from the noisy surroundings. There you are totally alone, just feeling the cruelty of wars and lives of the victims by touching the wall with names on it.

circulation



Q:  
How did the circulation respond to the concept?

A:  
Two black granite walls have to be mentioned, placed below grade, they are engraved in chronological order with the names of the men and women who sacrificed in the Vietnam War. The two walls are met with each other at the apex,

the dates 1959 and 1973 (marking the beginning and end of the war) “meet” thus closing the circle of the time span of the war.





2.27



2.28

details

Q:

How did details make a design successful?

A:

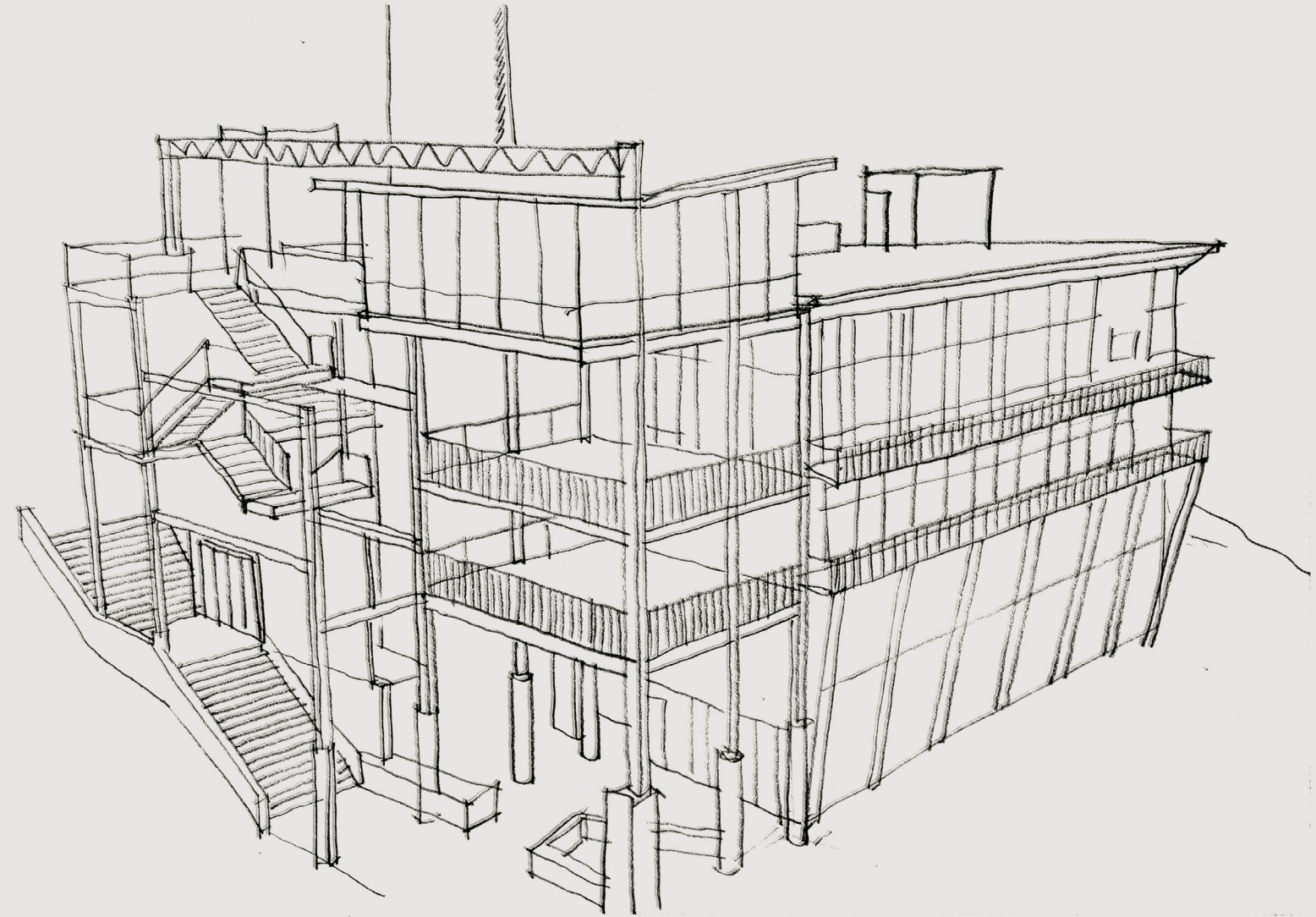
The Vietnam memorial is a place where viewers could feel something. It's like reading a book. "I purposely had the names etched ragged right on each panel to look like a page from a book<sup>10</sup>." On the wall live 58,175 names. There are five names on each line. The names on the wall are 0.53 inches high and 0.015 inches deep. If it is only a wall without the shining surface, then it would be just a wall. However, by polishing the surface to a high gloss, Lin skillfully employs the power of black to expand a field, and to create an endless space.

The memorials are tactile experiences of sight, sound, and touch. They trigger the sensibility of visitors completely connecting us with the material aspects of their construction as well as with the private memories and thoughts that bring us back into the past moments.

summary of precedents

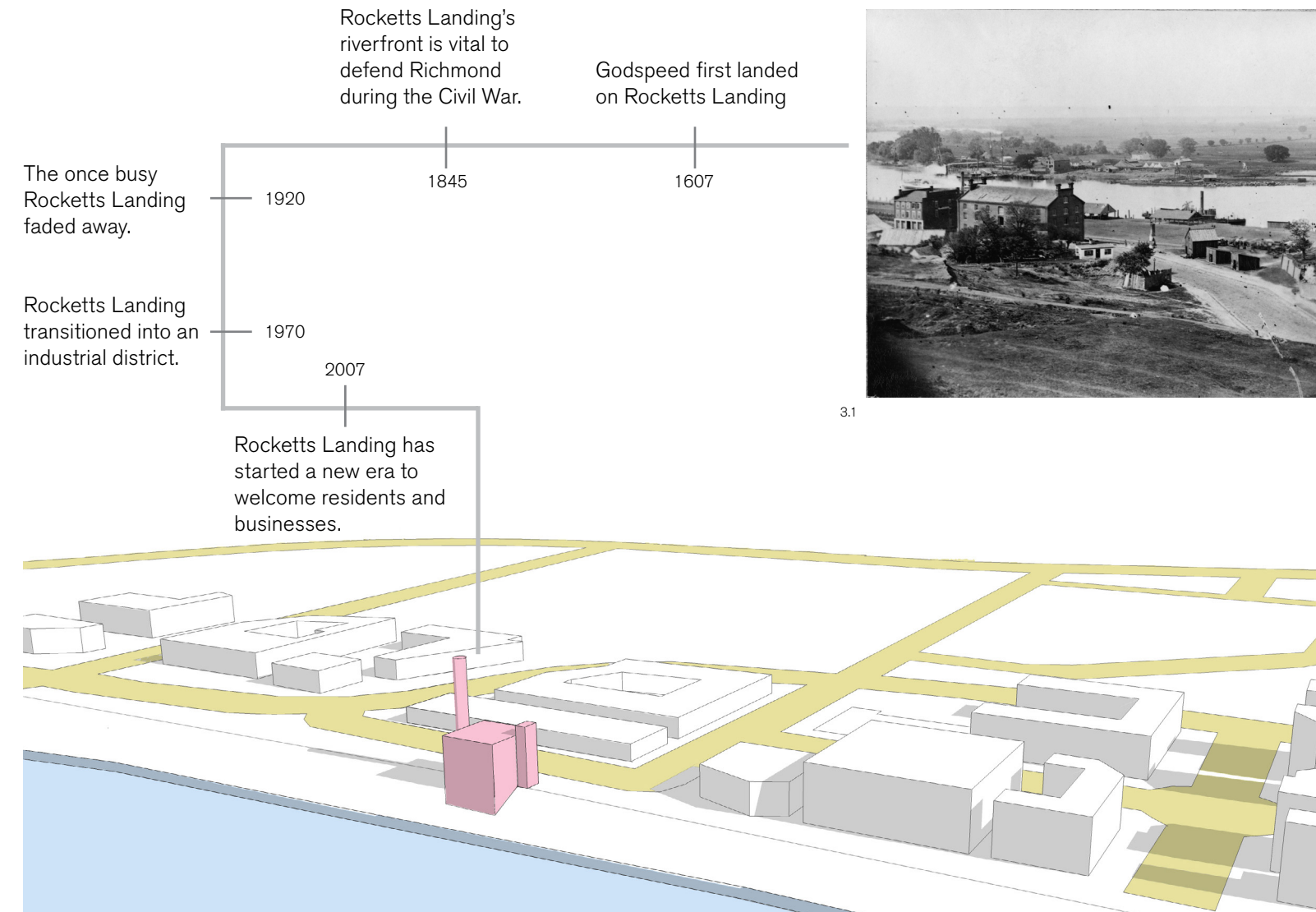
STUDY PRECEDENT	solitude / collaboration	nature	senses
Chapel of St.Ignatius		front courtyard pond organic forms natural light	beeswax wall hand-toweled plaster wall
National Gallery of Art East Wing		waterfall tree in the atrium	natural light artificial light
Jewish Museum Berlin	12° gradient garden open-mouthed iron faces 66 feet high walls		echoes heavy and cold huge doors darkness of interior space the sound of the metal
Vietnam Veterans Memorial Wall	walls below grade walk into the cloistered space		black granite walls high reflective surface cold surface

### 03. site analysis

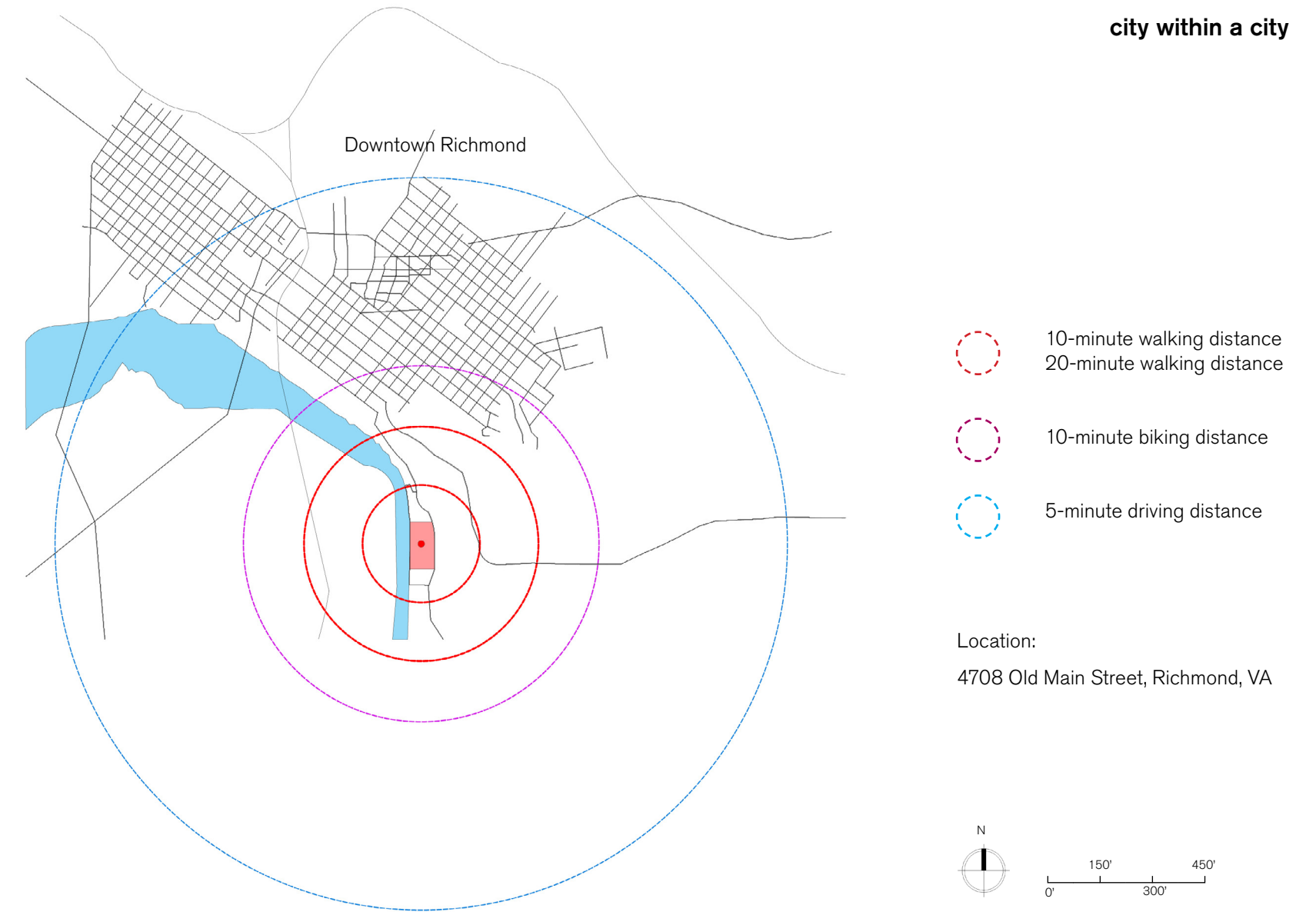




## history



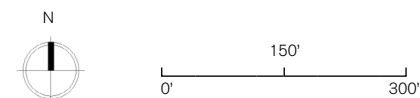
## city within a city



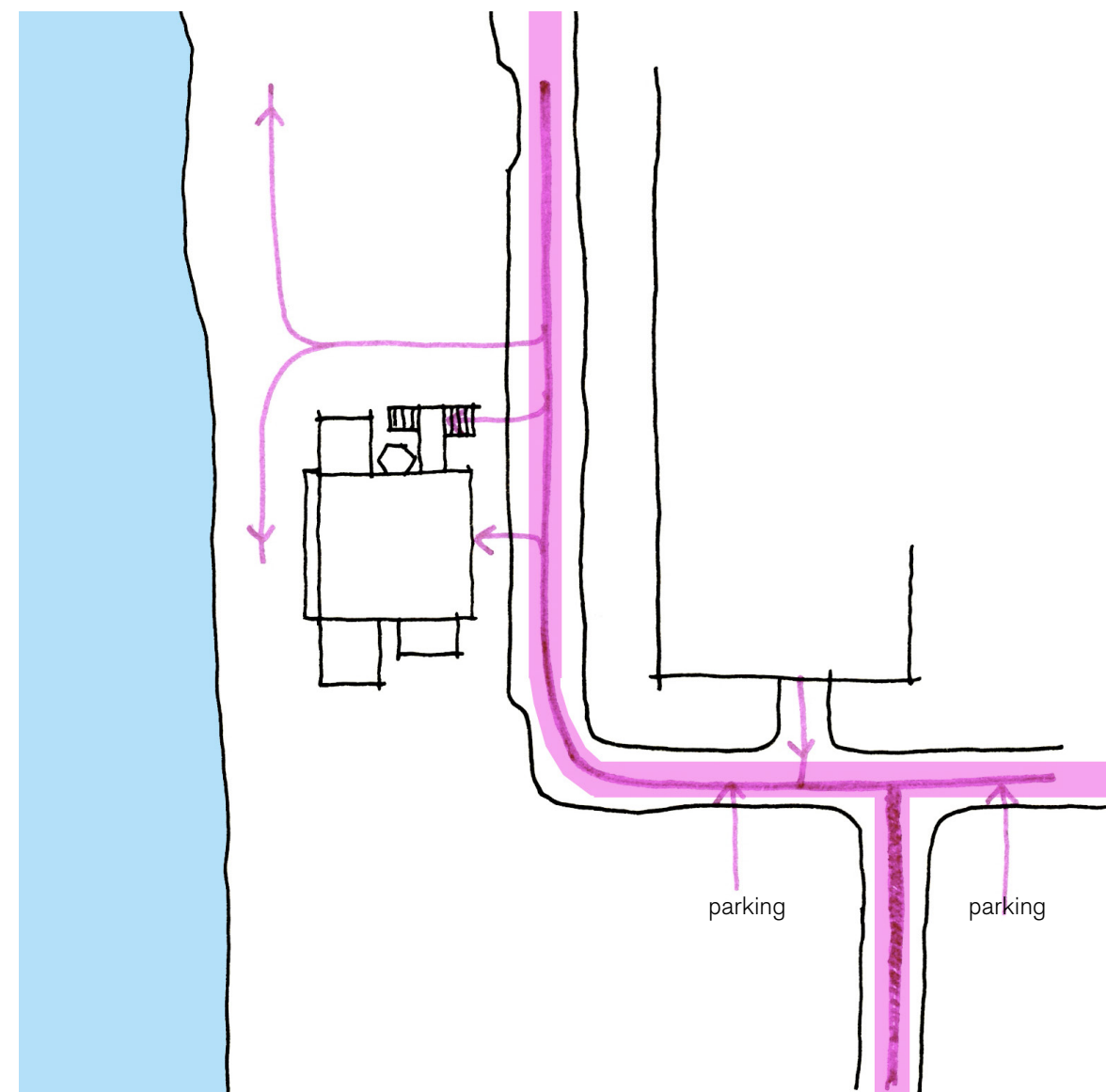


a mile of riverfront  
 3 minutes from downtown  
 5 minutes to i-95 and i-64  
 ample parking  
 riverfront clubhouse

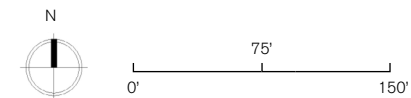
1500 residences  
 restaurants  
 fitness center and pool  
 retail center  
 office space



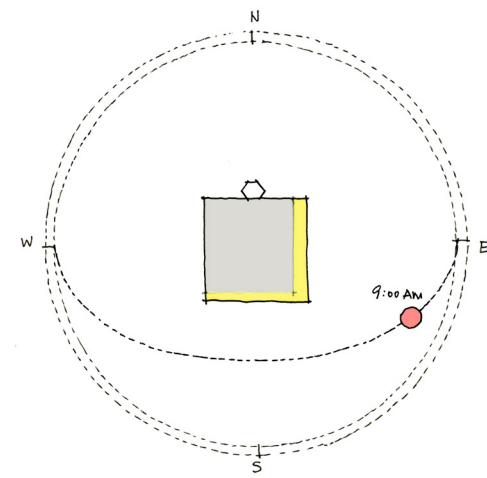
### community analysis



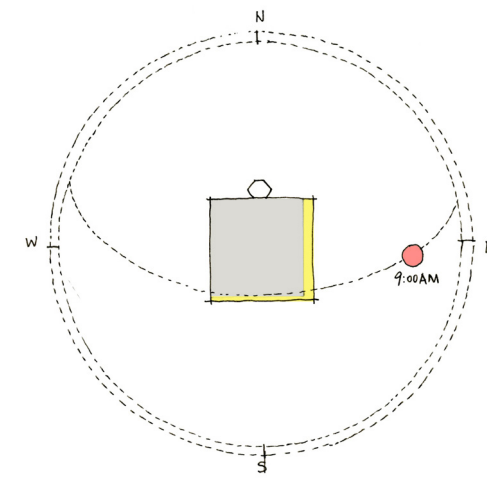
vehicle circulation  
 pedestrian circulation



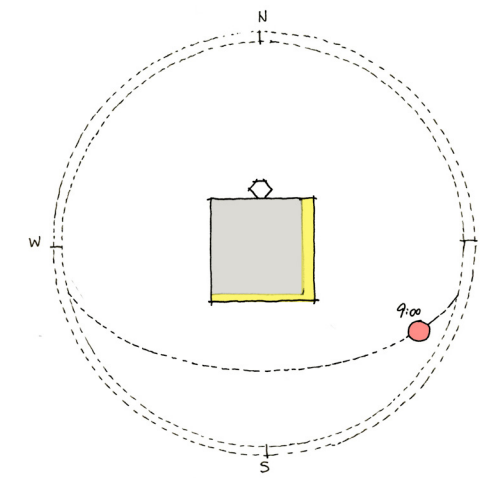
### traffic circulation analysis



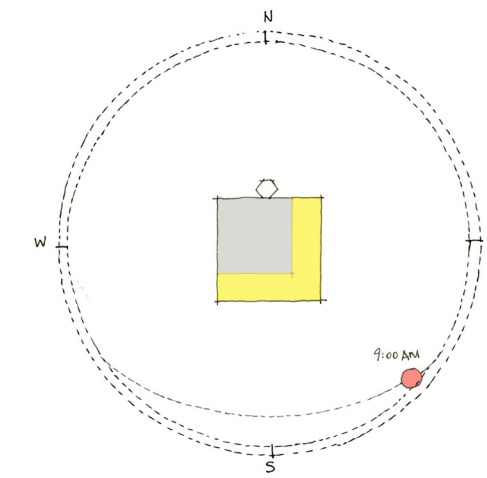
March 21 - 9AM



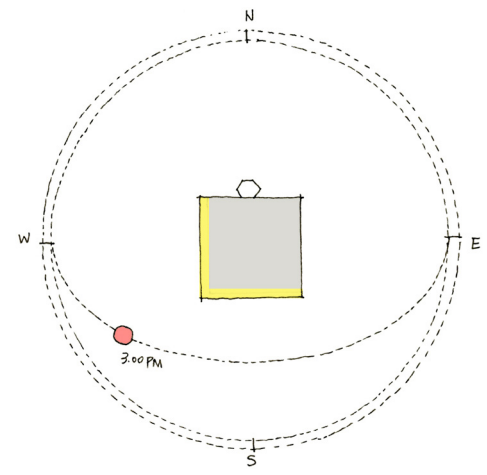
June 21 - 9AM



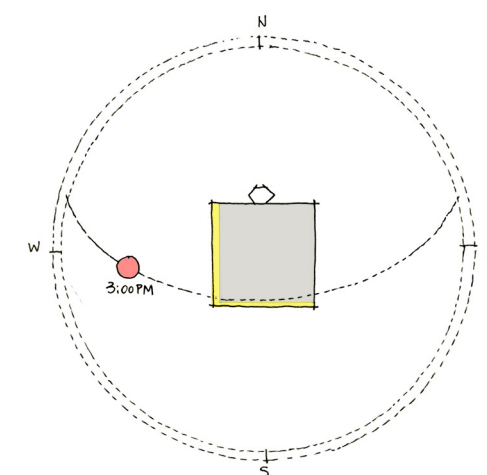
September 21 - 9AM



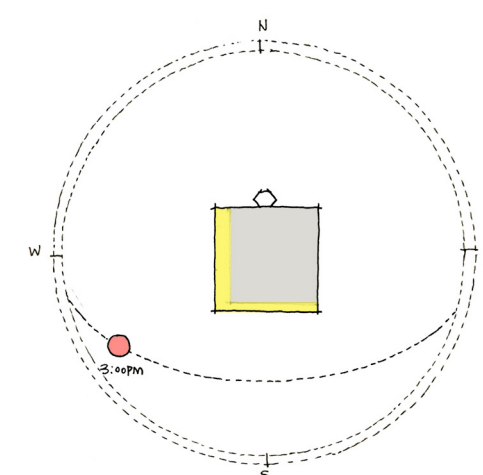
December 21 - 9AM



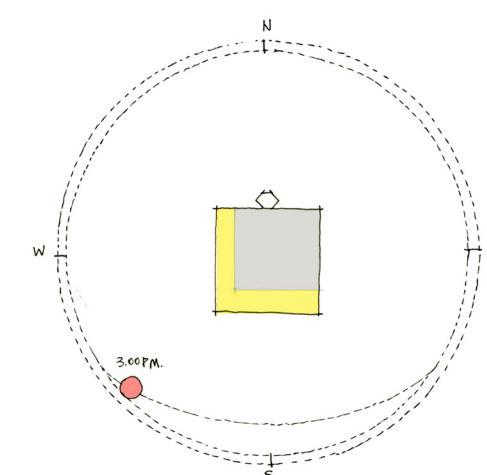
March 21 - 3PM



June 21 - 3PM



September 21 - 3PM



December 21 - 3PM

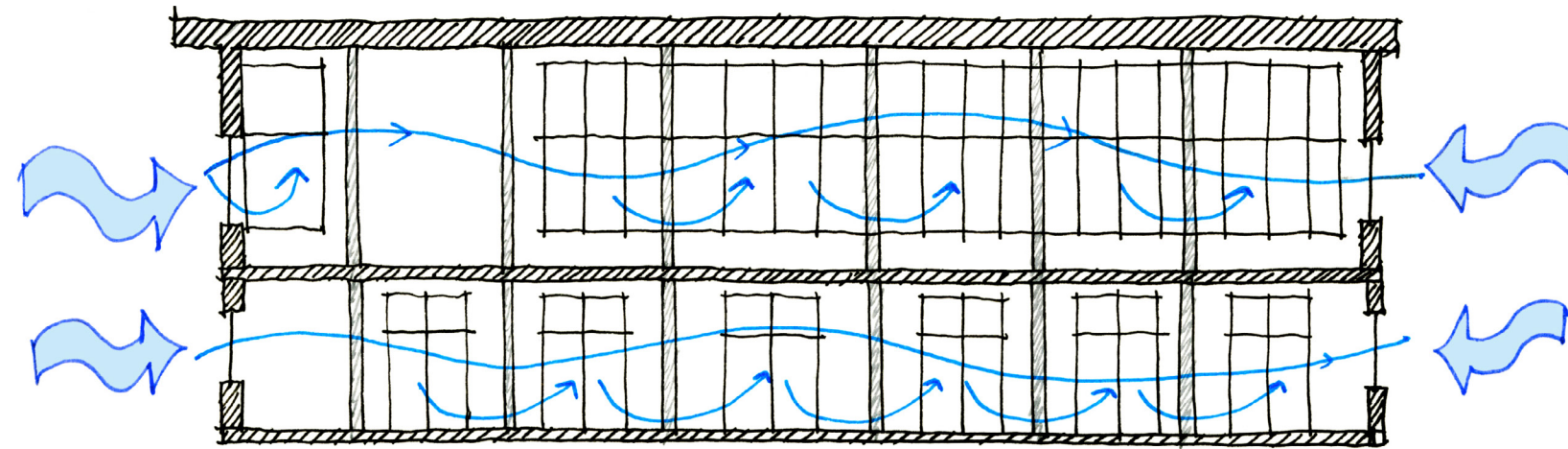
## lighting analysis

Lighting gives space an expression beyond form. With constantly changing direction and intensity, it has the power to illuminate specifically and cast shifting shadows.

As illustrated on the left, the southern area can gain the longest hours of natural light and the northern wall gets the least amount of heat.

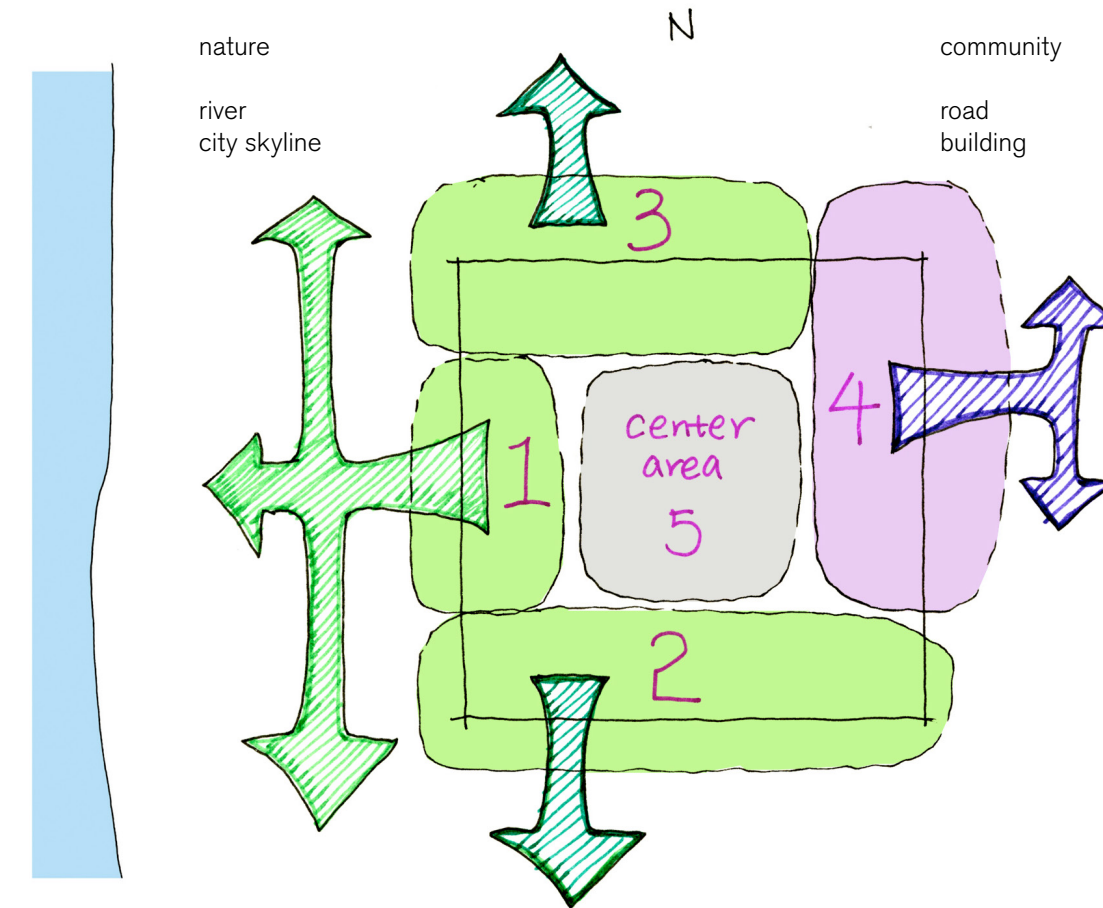
Primary working and exhibition spaces should be located in southern and western areas. Auxiliary spaces such as bathrooms, archive room or meeting room should be in northern and eastern areas.



## wind analysis



winter and summer wind flow line analysis  
north-south section

## view analysis



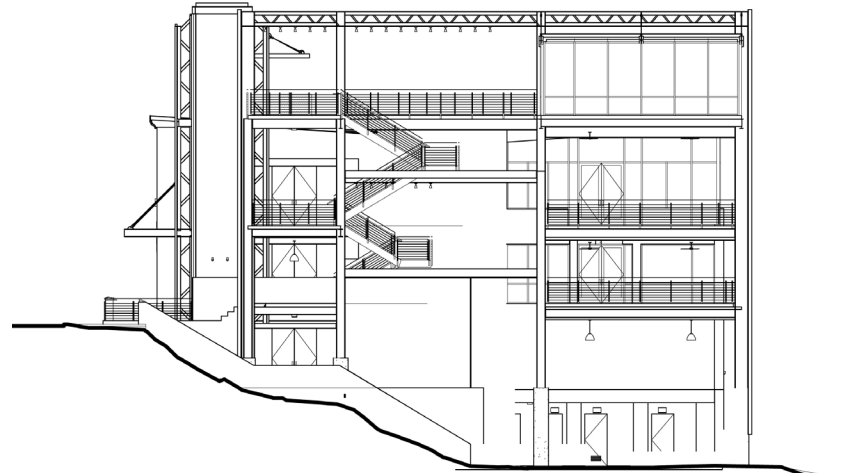
-  view to the nature
-  view to the community

best to worst view areas  
1 > 2 > 3 > 4 > 5

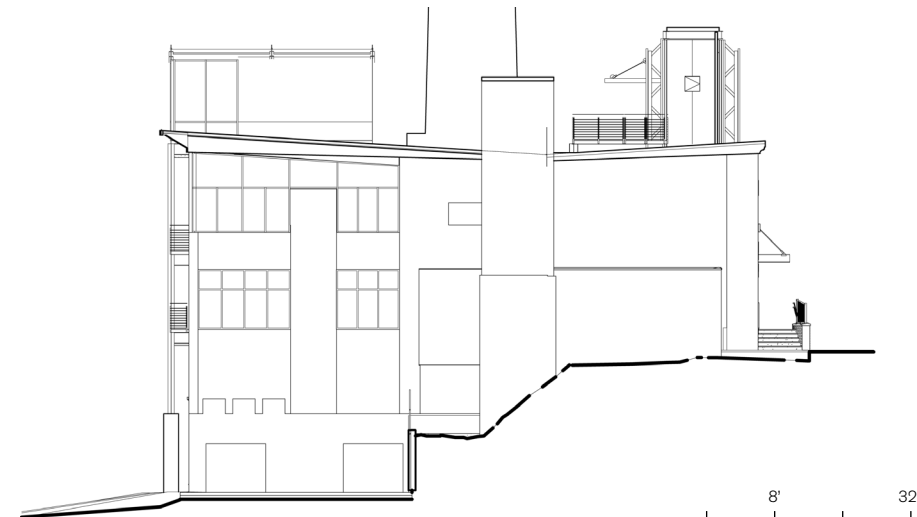
Rooms with less light and views  
would be better suited for archive  
rooms or bathrooms.

Rooms with more natural lighting  
and better views would be suited  
for studio and gallery spaces.



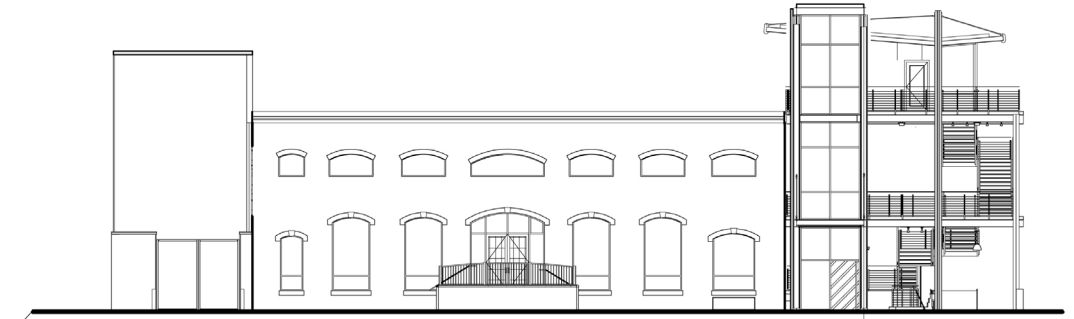


north elevation

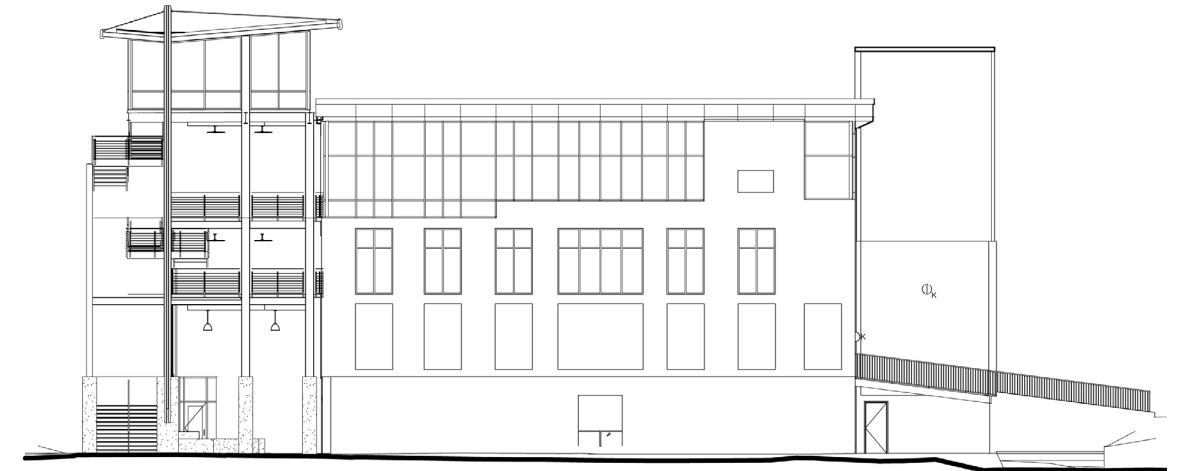


south elevation

exterior elevations



east elevation



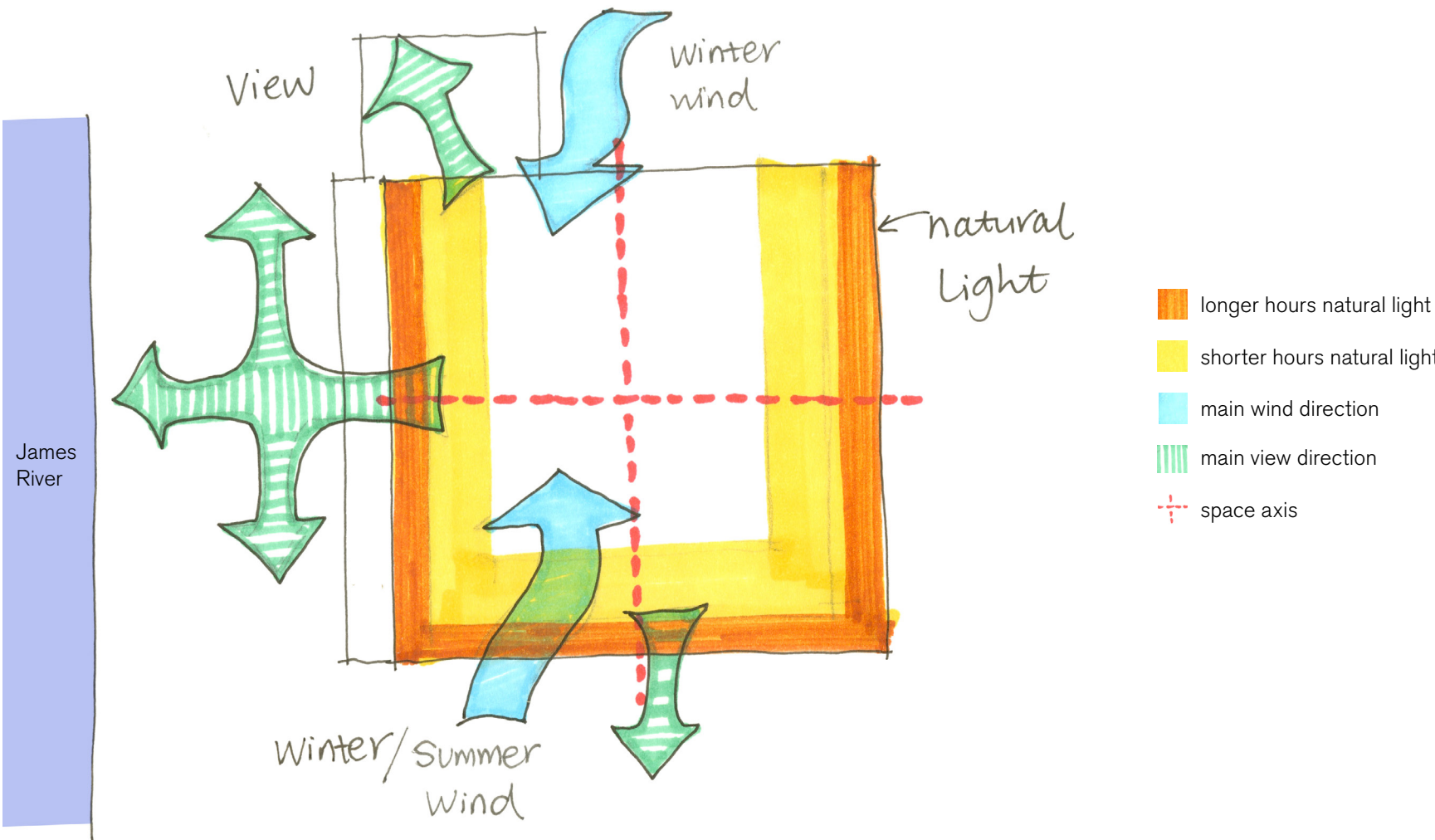
west elevation

IBC use group:	Existing: Restaurant Group A-2 Proposed: Educational Group E
Year built:	1850
Number of floors:	4
Permit type:	B
Use type:	A2B
Imp type:	ADD
Construction type:	Concrete
Latitude:	37.51812848
Longitude:	-77.41603328
Width / Depth:	129 feet / 90 feet
Zoning District:	RF-1 - Riverfront
Planning District:	East
Traffic Zone:	1110
Land Type:	Primary Commercial / Industry Land
Means of egress:	3 stairs, 1 elevator, 5 exit doors
Floor area of renovation:	3rd and 4th floor only, 13.000 sq ft

CVI POWER PLANT LLC 4708 Old Main St Richmond, VA 23231

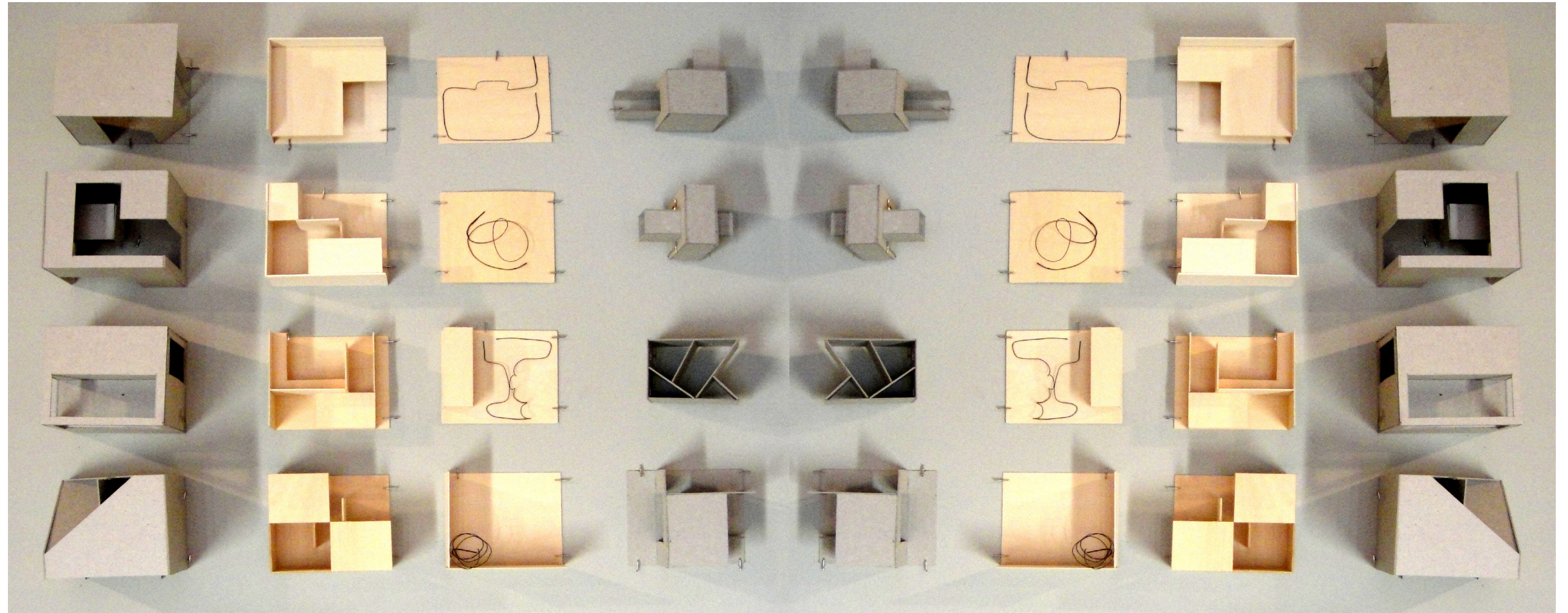
code overlay

summary of site analysis

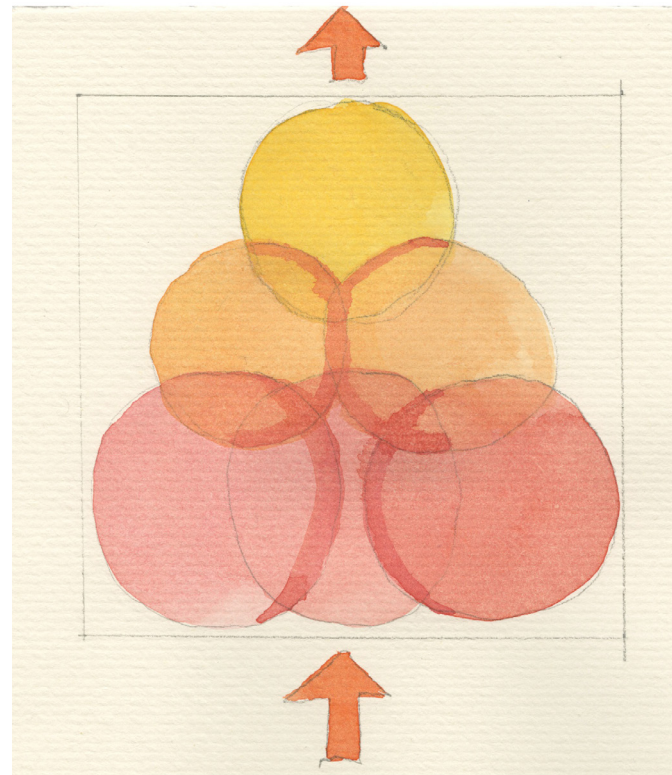




## 04. concept development

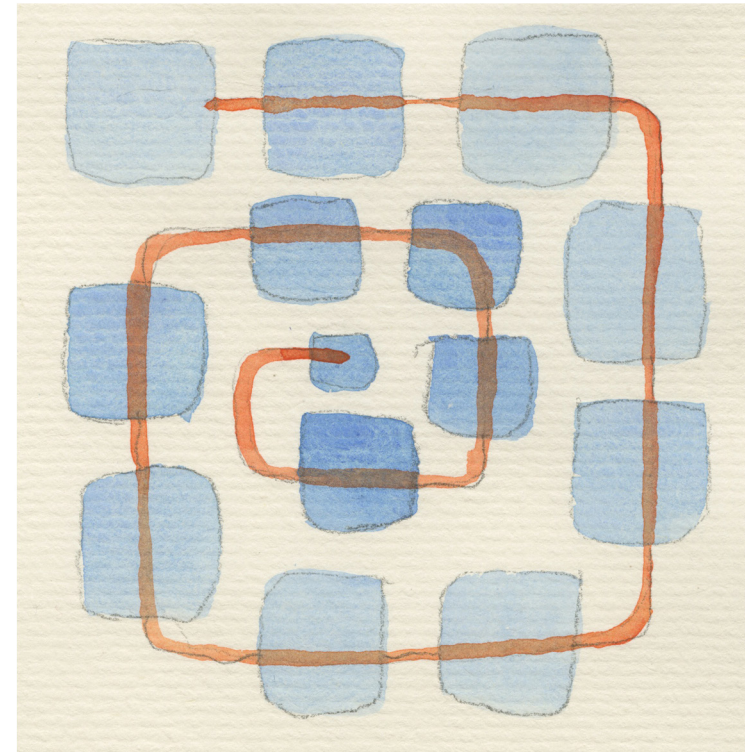






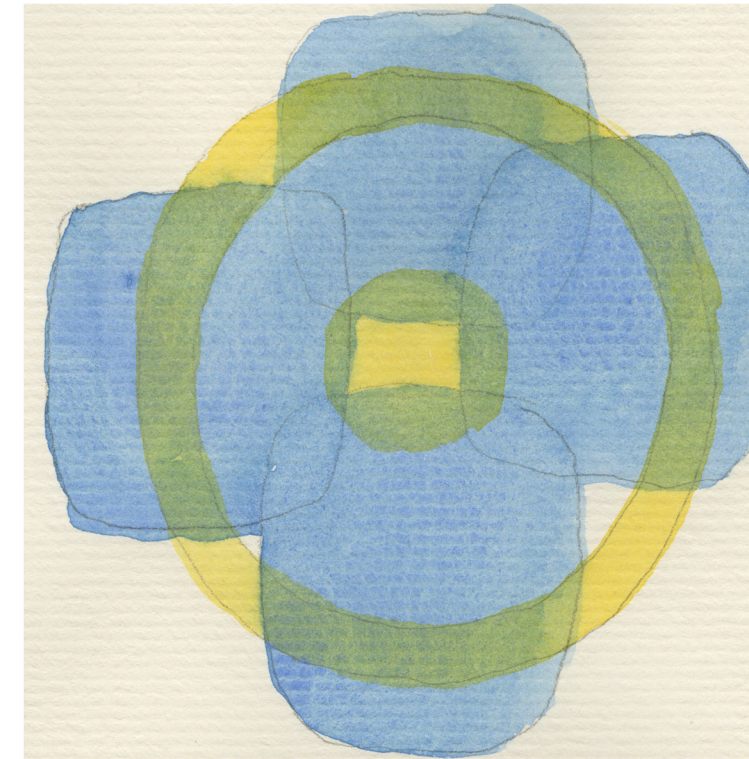
school

From basic classes to advanced studies, education helps us to build our own knowledge structure and encourages us to be critical thinkers and to solve problems independently.



design firm

Based on a flow-line production, each person is responsible for a part of the line and works with others to accomplish one project.



MOB 2030

MOB2030 combines the school and the firm into an unique place for recent graduates to practice design in real world and ideal world situations.

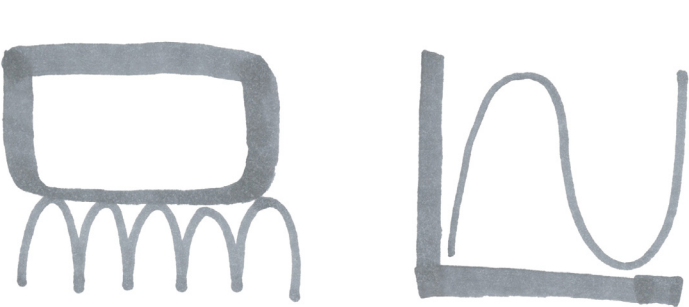


Three lines indicate critical relations in four groups of the thesis: site-driven, building-driven, interior space-driven and program-driven.

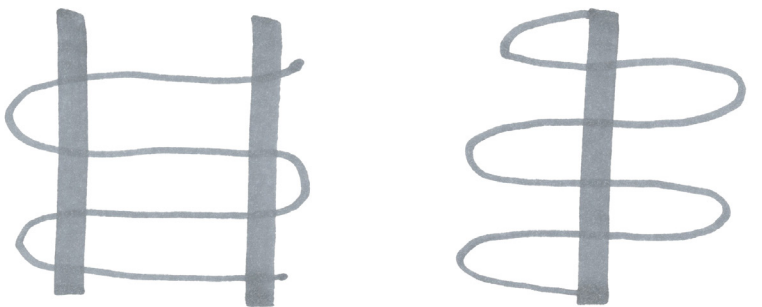
**Site-driven** relationships exist between the river and the building, and the ground and the building. As the diagram to the left shows, the thick line indicates the river's sharp turn. Also on the right diagram, the ground has a significant height change. The plan and the elevation have similar characteristics.



**Building-driven** relationships exist between vertical and horizontal elements. As seen in the diagram on the left, the thick line shows the vertical element of the building—the 100' high chimney. As the diagram at the right shows, the thick line emphasizes the horizontal element; the outdoor corridors are the extension of the interior space.

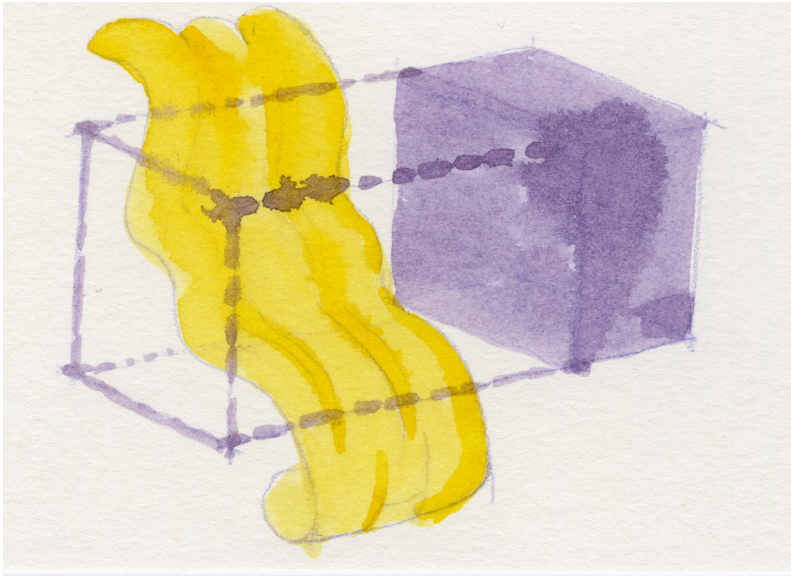
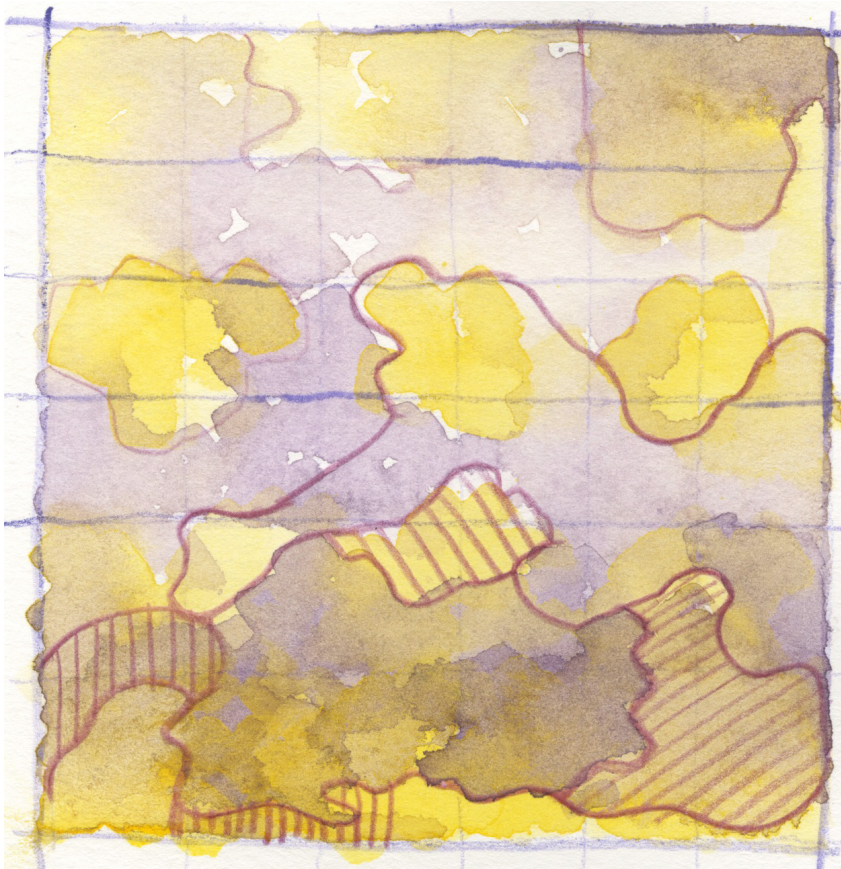


**Interior space-driven** relationships exist between the third floor and the fourth floor, and the space plan and its circulation. As shown on the left, the curved line implies a series of columns on the third floor and the thick line shows the fourth floor as a big open space. There is also contrast between busy and free, heavy and light, and small and large. On the right diagram, the thick line shows the best area in the space, and the curved line is very simple circulation through the whole space.

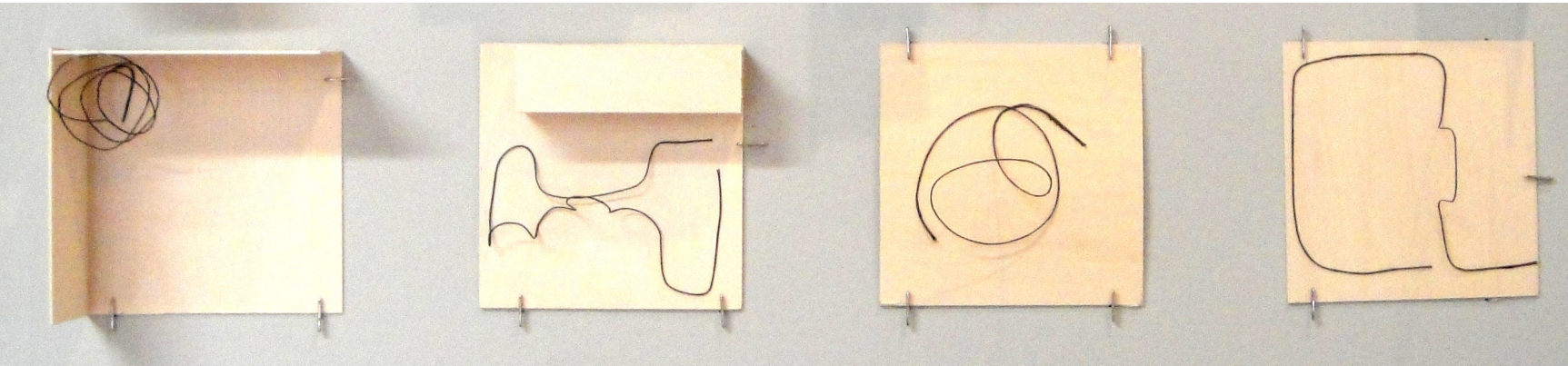


**Program-driven** relationship exist between the social space and the other two spaces—work and exhibit. As shown on the left, these two thick lines represent work and exhibit spaces, which are the two main functional areas in the program. The curved line indicates the collaboration space, connecting the other two spaces together to shape a whole. On the right diagram, the thick line is the social space and other two spaces surround it.





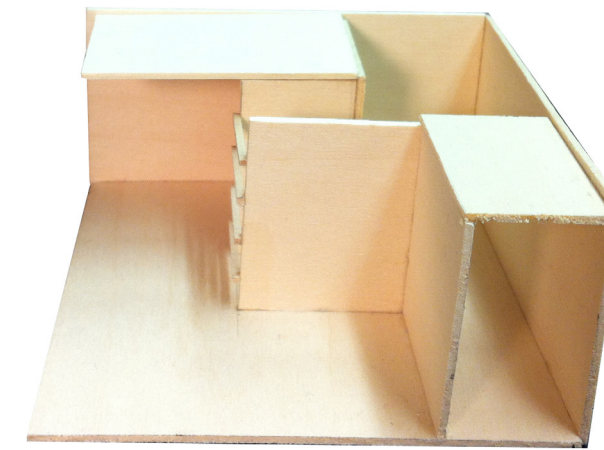
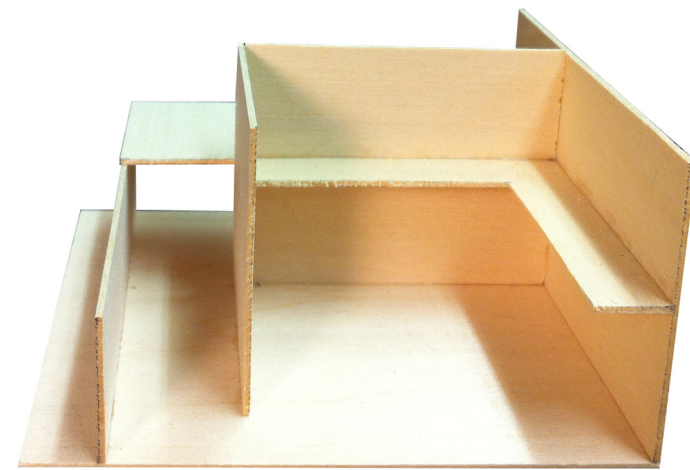
Watercolor's natural color and liquidity taught me how one color spread on a surface can meet another to create rich and interesting boundaries. It reminded me that the collaboration steps in the space should flow naturally like water.



I used different media to discover the concept of varied angles. The above four models are quick plywood and steel wire concept models that to transfer the concept from previous 2-D drawings to 3-D models.

The shape of wire represents the stairs' potential location. These models also helped me to learn how one object in a space can influence itself and the whole space.

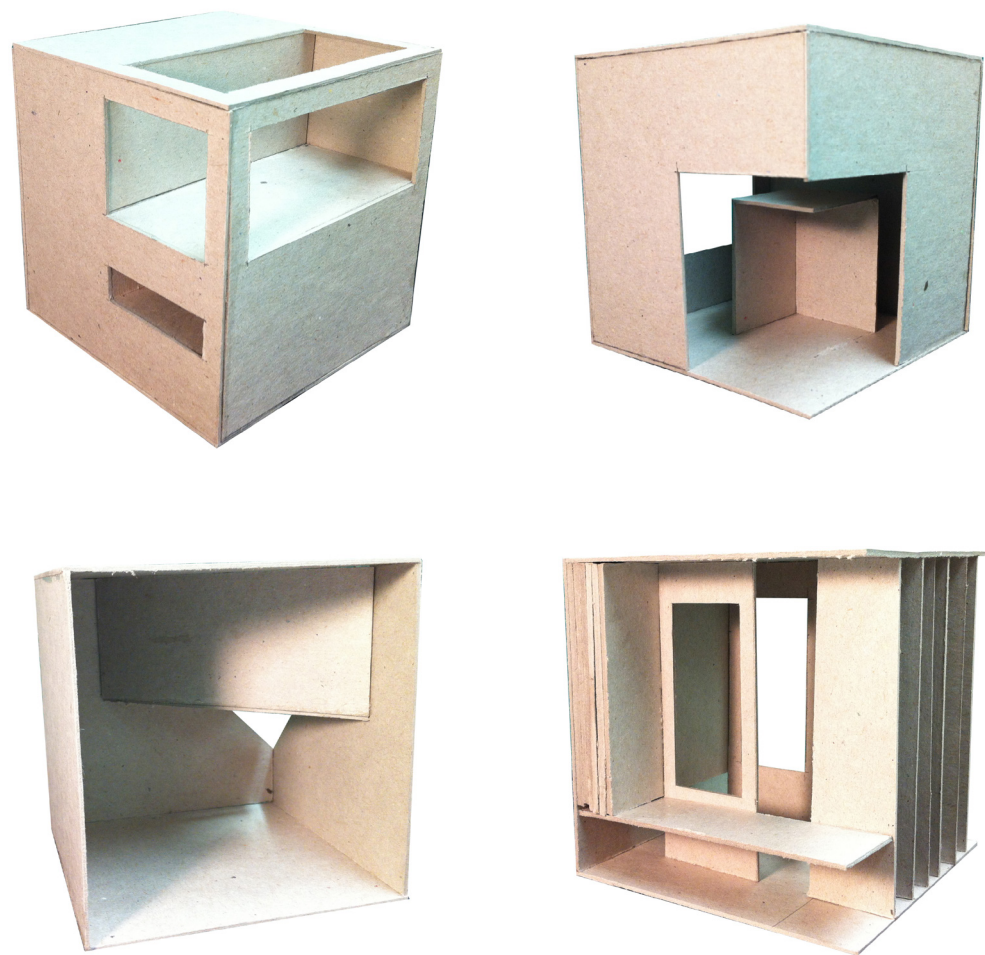
## conceptual space planning principles discovery



After the lessons learned from concept models, I started to add the building's elements—two floors and columns in the lower floor—to further discover the space planning principles. Shown from left to right, the two separate floors, the partial height space, and the central connecting area are the three organizing principles I found from these models.

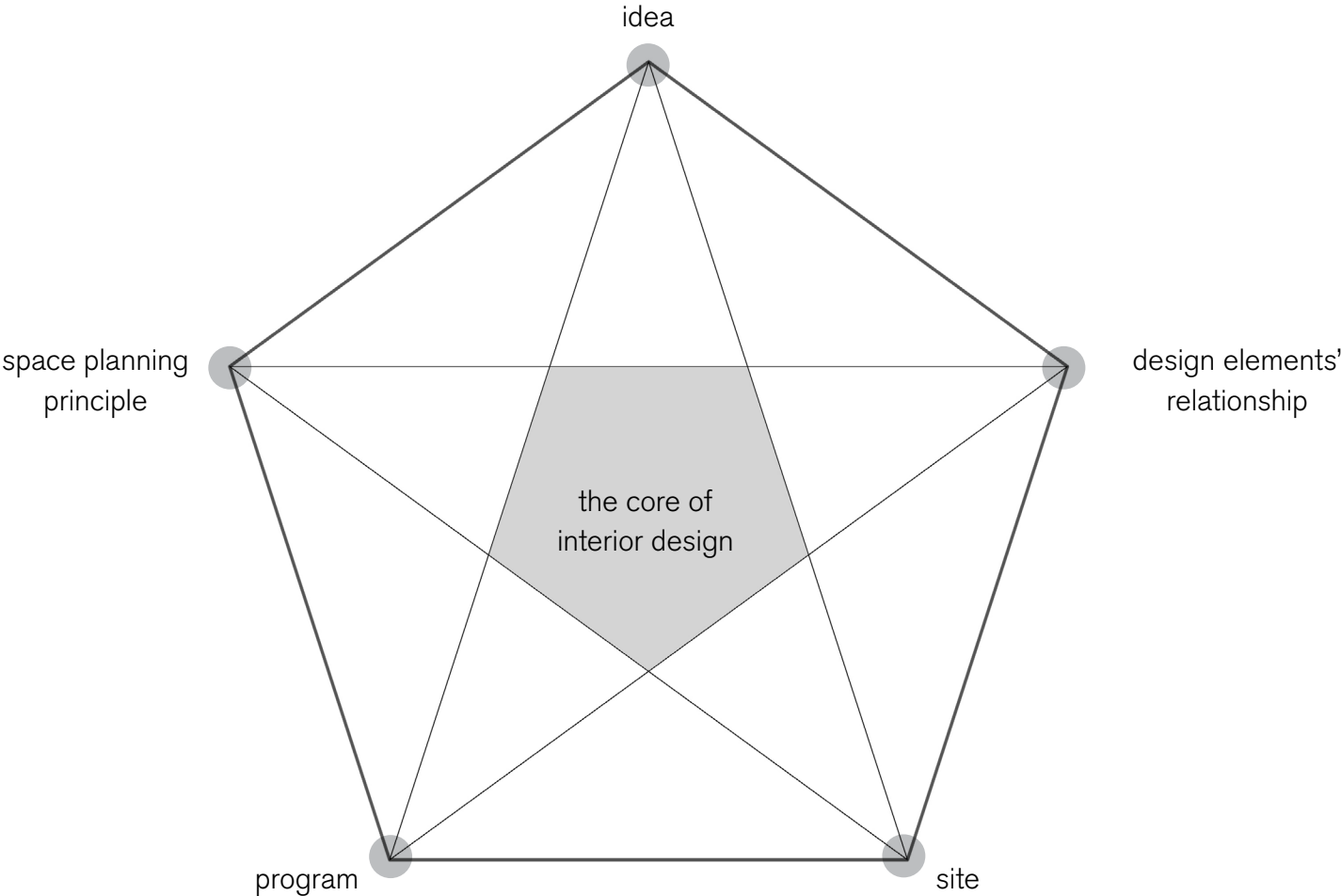


conceptual design elements' relationship discovery

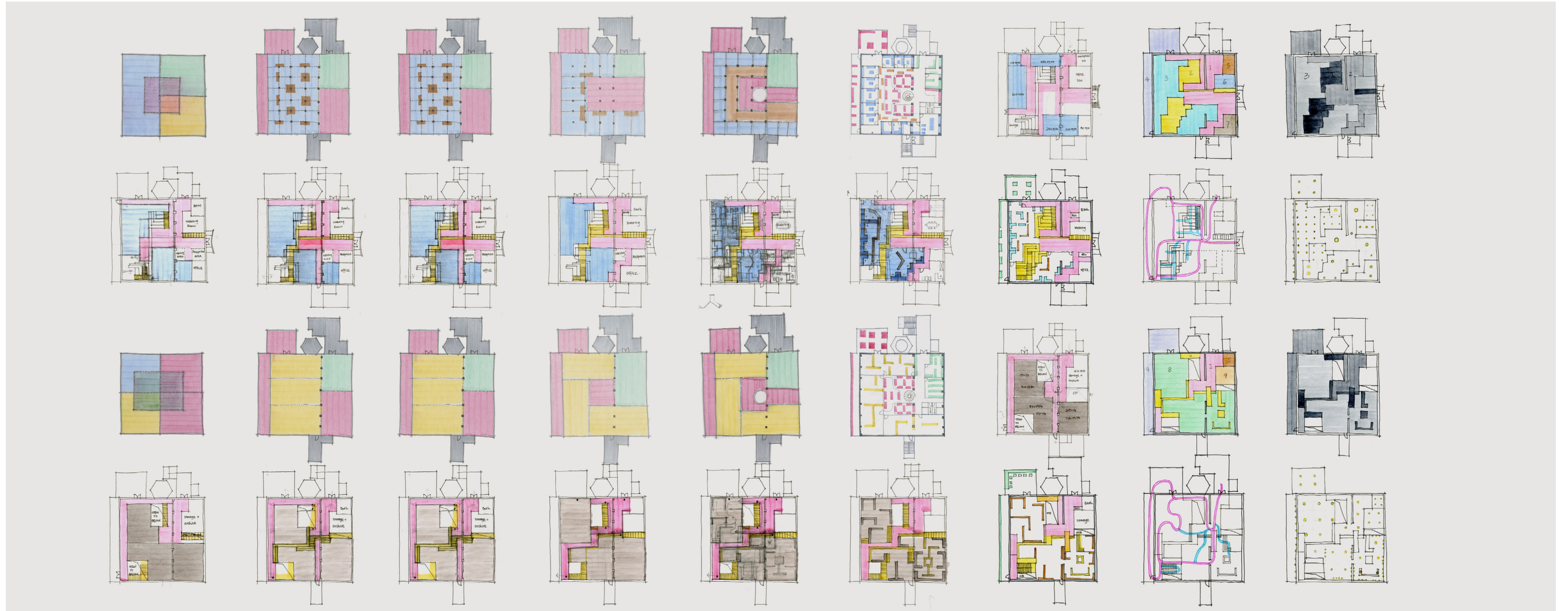


I made a series of concept models to learn how to use object, light and volume to mediate public and private space. They are all 4"×4"×4" cubes and only made of one material. These restrictions help me effectively to realize how to apply these fundamental design relationships to my specific space and program.

summary of concept development

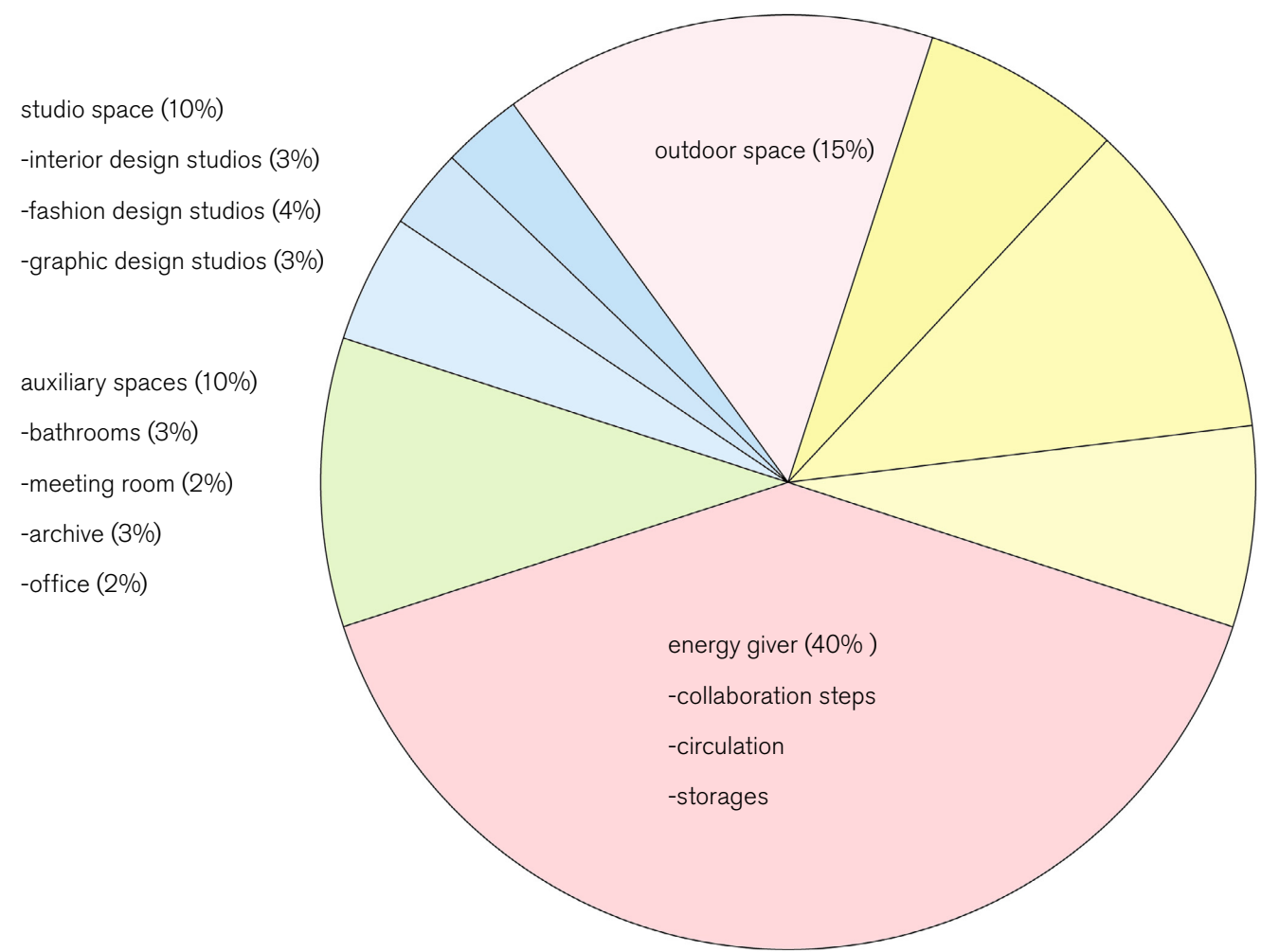


# 05. space planning





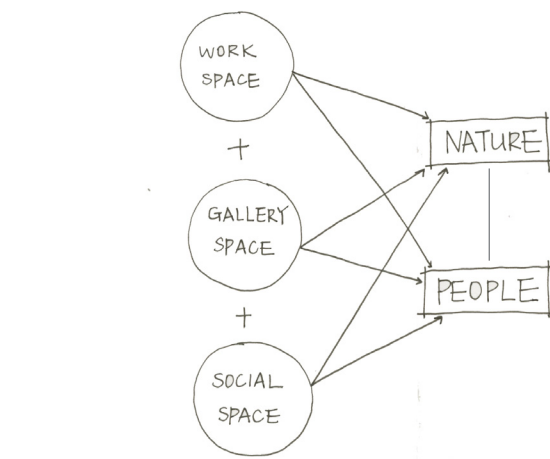
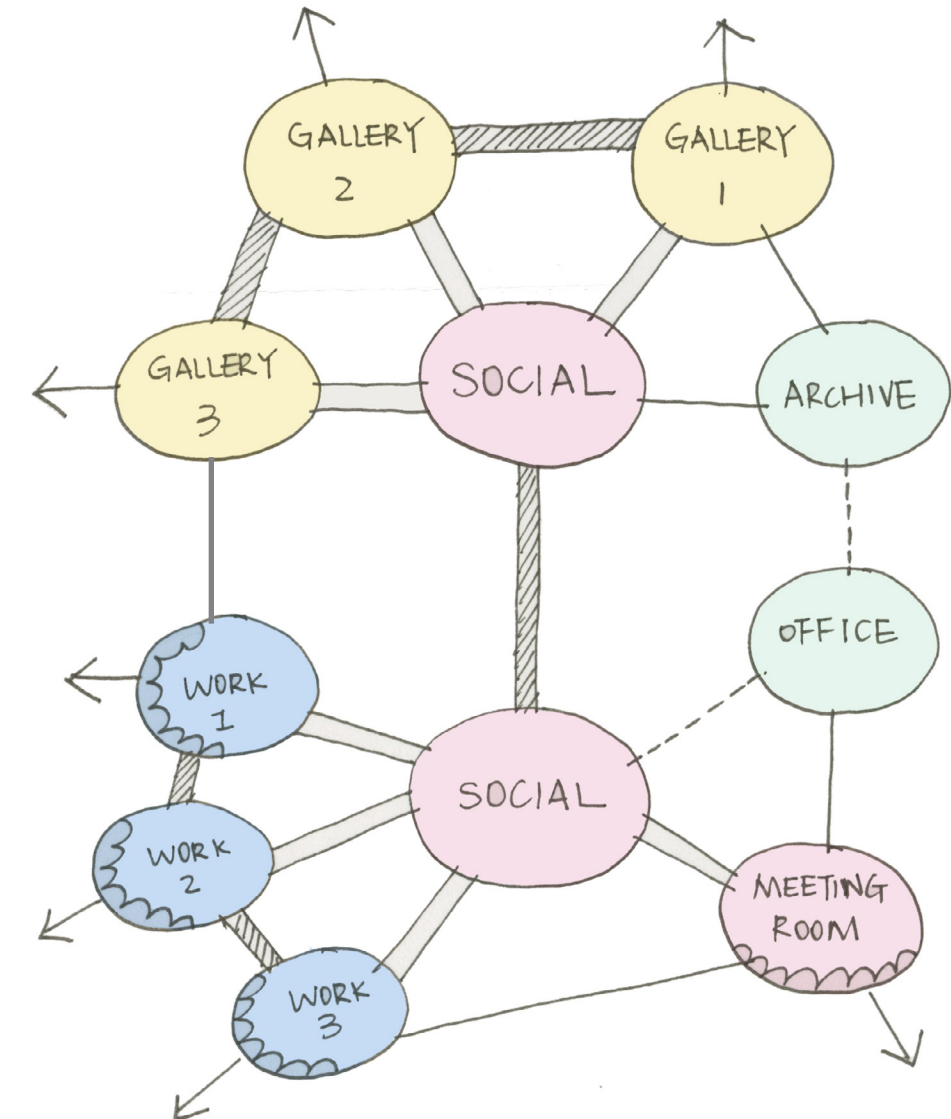
floor area ratios



gallery space (25%)  
-interior design gallery (7%)  
-fashion design gallery (11%)  
-graphic design gallery (7%)

total interior area = 13,000 sq ft

adjacency diagram



conceptual adjacency

The goal of space planning is to let people fully interact both with nature and other people to gain energy.

LEGEND

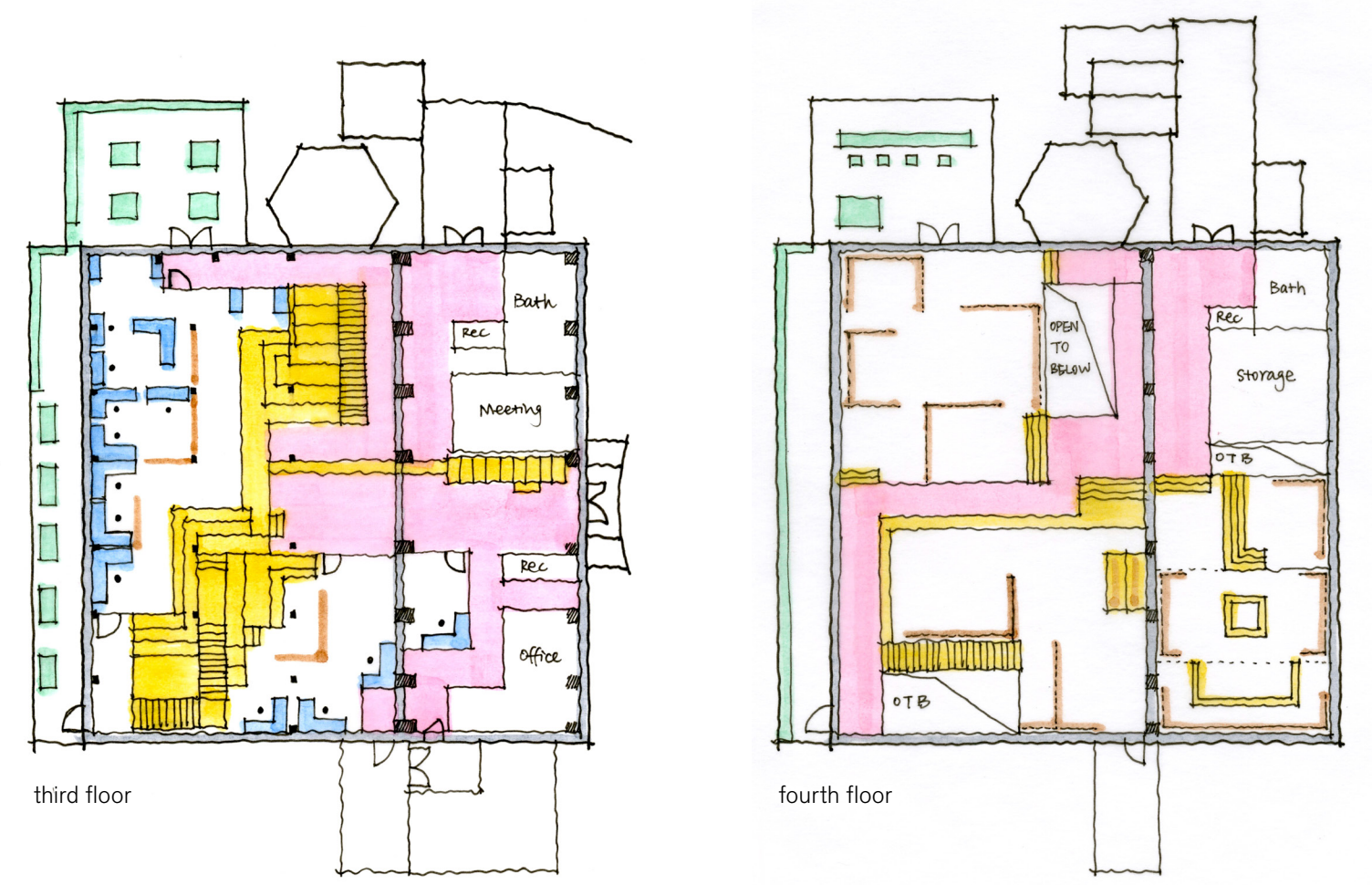
- |                        |                      |
|------------------------|----------------------|
| = IMMEDIATELY ADJACENT | = MINOR RELATIONSHIP |
| = CLOSE + CONVENIENT   | = ACOUSTIC PRIVACY   |
| = CONVENIENT           | = LIGHT + VIEW       |

schematic plan



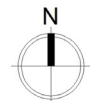
Benchmark 1 – functional spaces are arranged to surround the central spiral stair, which can provide energy to outer layers.

schematic plan



Benchmark 2 – central spiral stairs spread out the interior space and expanded with more functions, inviting more people to collaborate.

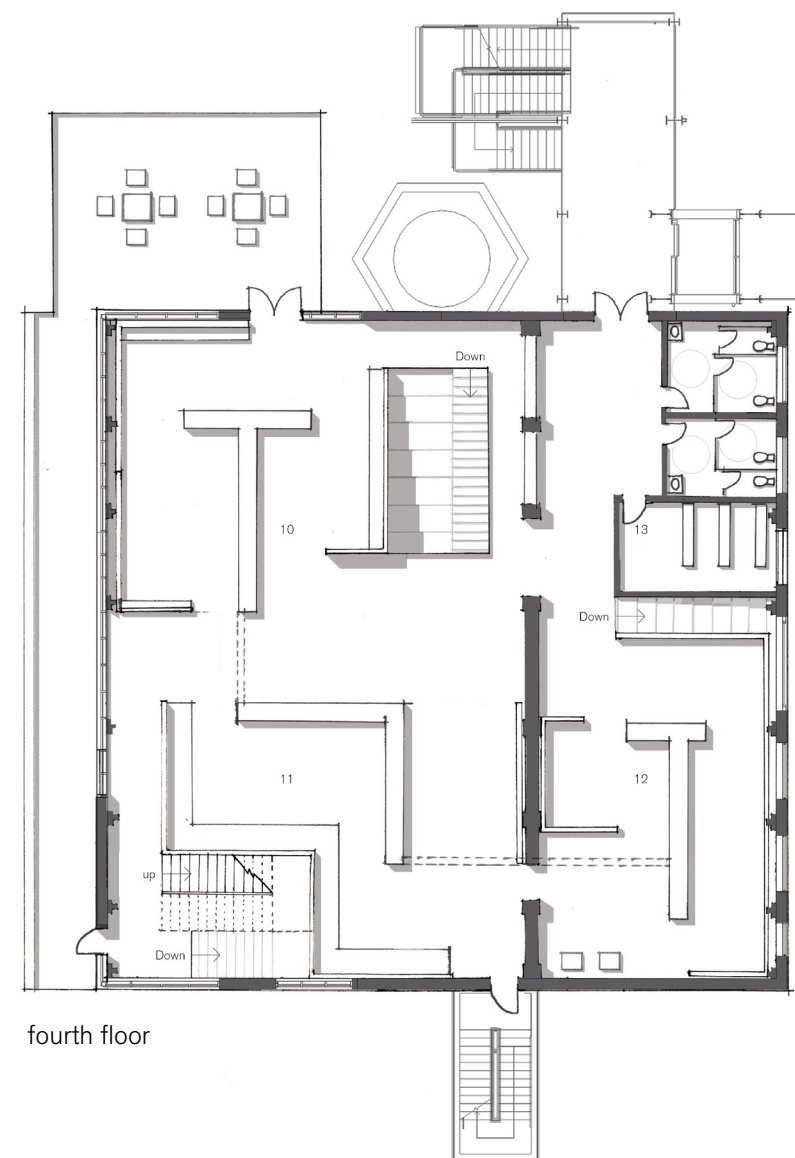
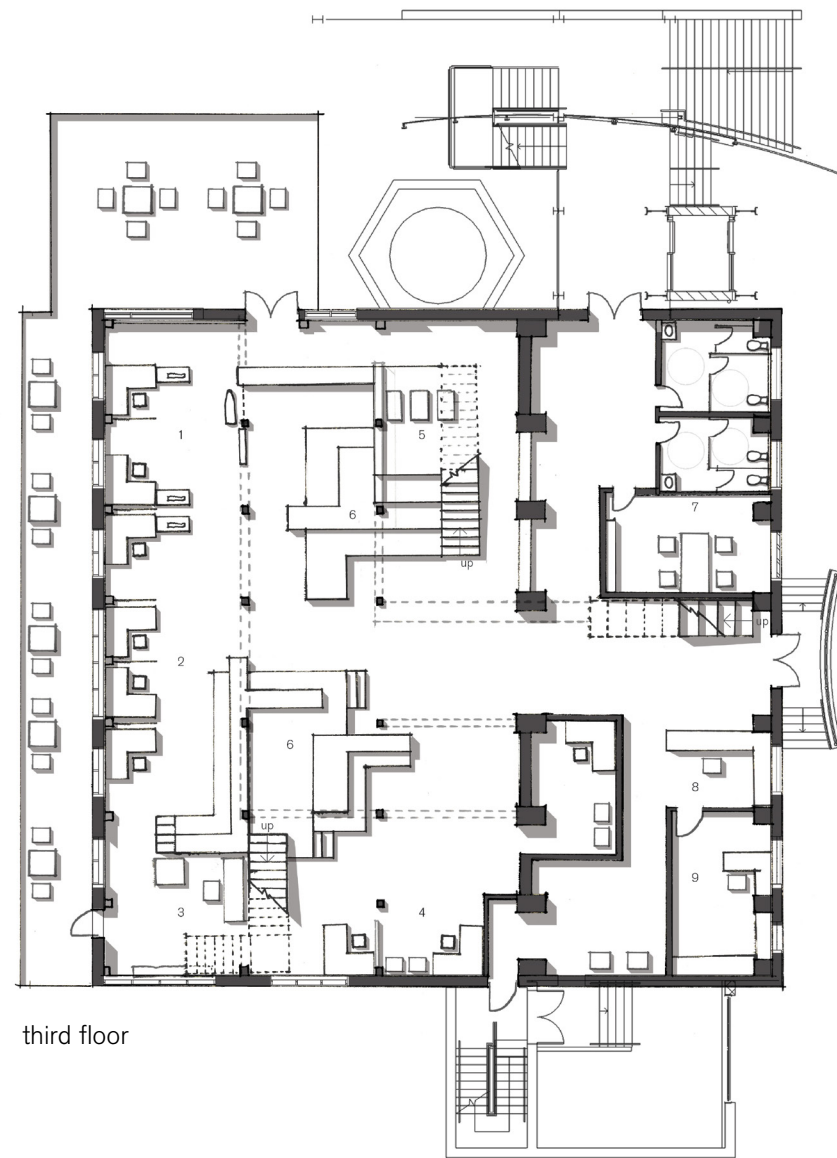




0" 4" 8" 16"

### Legend

1. fashion design studio
2. interior design studio
3. printing room
4. graphic design studio
5. lounge
6. collaboration steps
7. meeting room
8. reception
9. office
10. interior design gallery
11. fashion design gallery
12. graphic design gallery
13. archive room

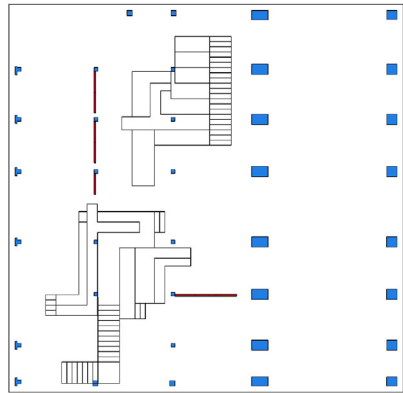


### final floor plan

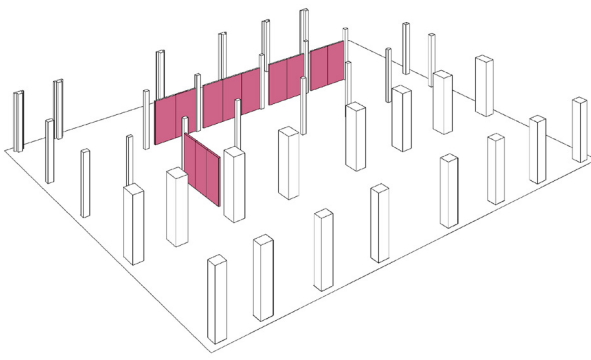
The floor plan was organized by the collaboration steps as the “energy giver” in the space. It connects between third floor and fourth floor, inside and outside space, and dynamic and static space. The collaboration steps spread through the interior space in three different areas. These three areas are connected by overhead elements and by floor treatments.

As the energy giver in the space, the collaboration steps also encourage those activities that inspire designers' passion. It provides designers ten ways to work, five ways to exhibit works and two ways to connect to the nature. The collaboration steps connect boundaries together: public-private-public; social-self-nature; void-solid-void; and open-closed-open. Together they play a spatial melody.

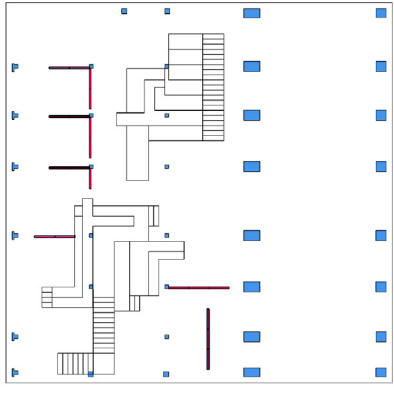
**third floor pin-up panel layouts**



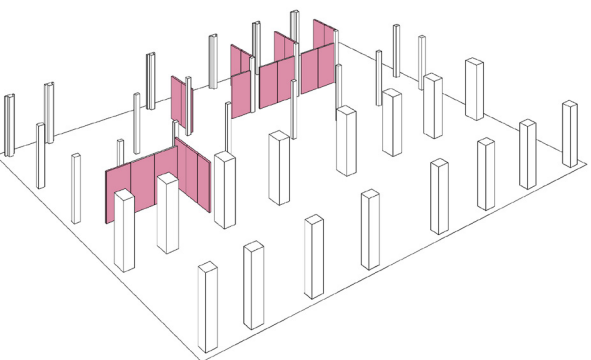
layout-1



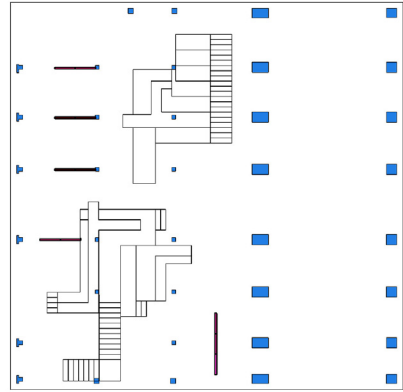
Layout-1 creates the most private studio space for designers who want to have a quiet and personal moment.



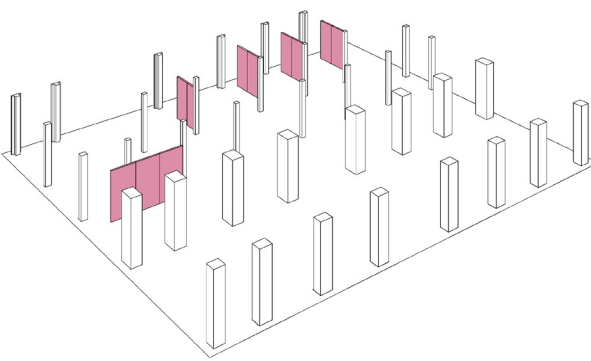
layout-3



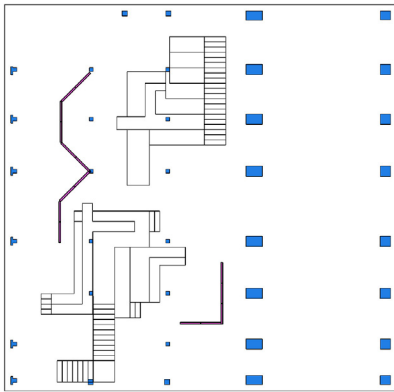
Layout-3 divides the space into different groups for designers who need an informal meeting to discuss current topics with others.



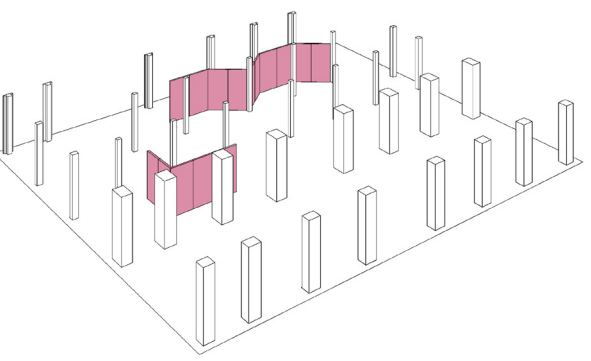
layout-2



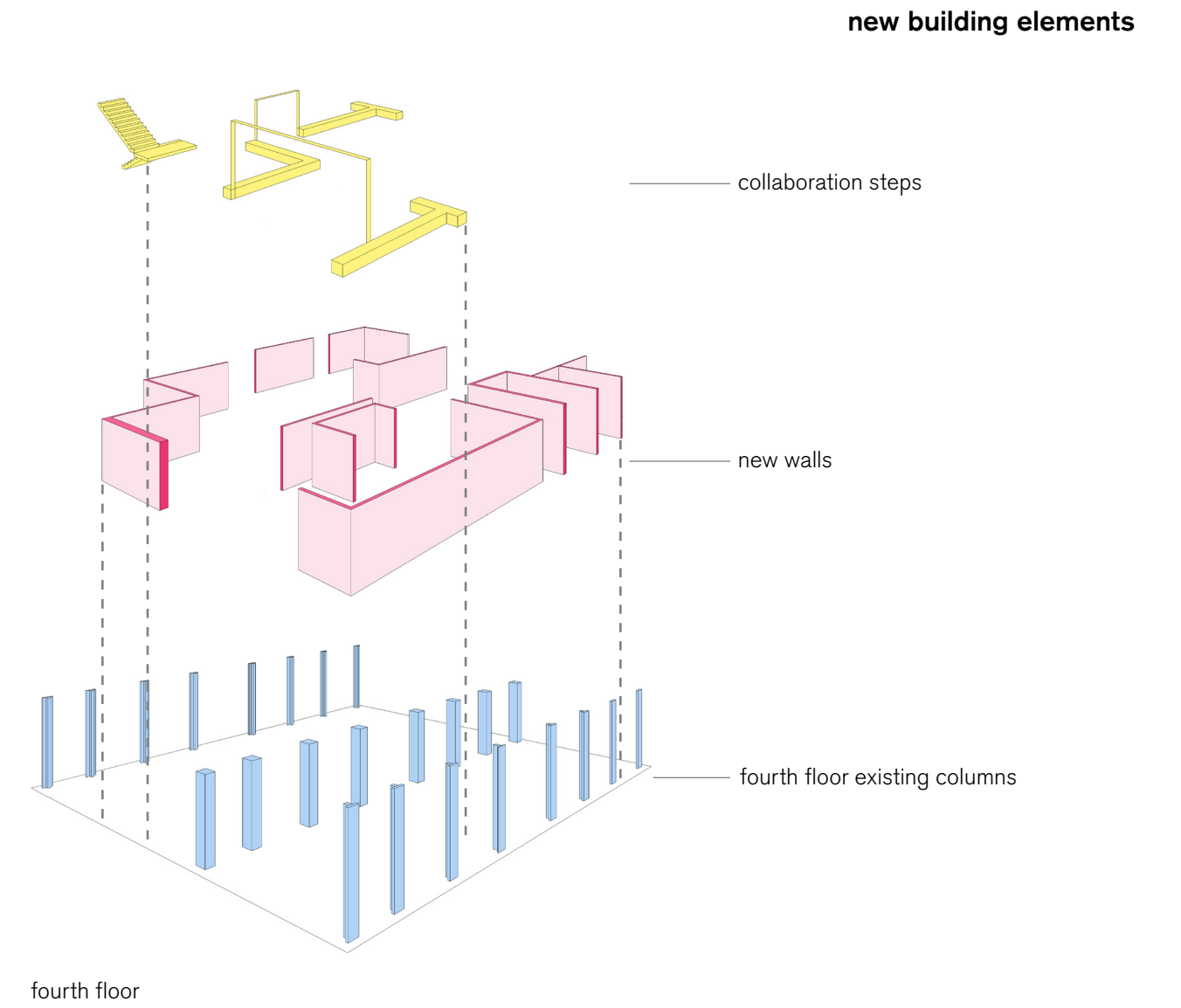
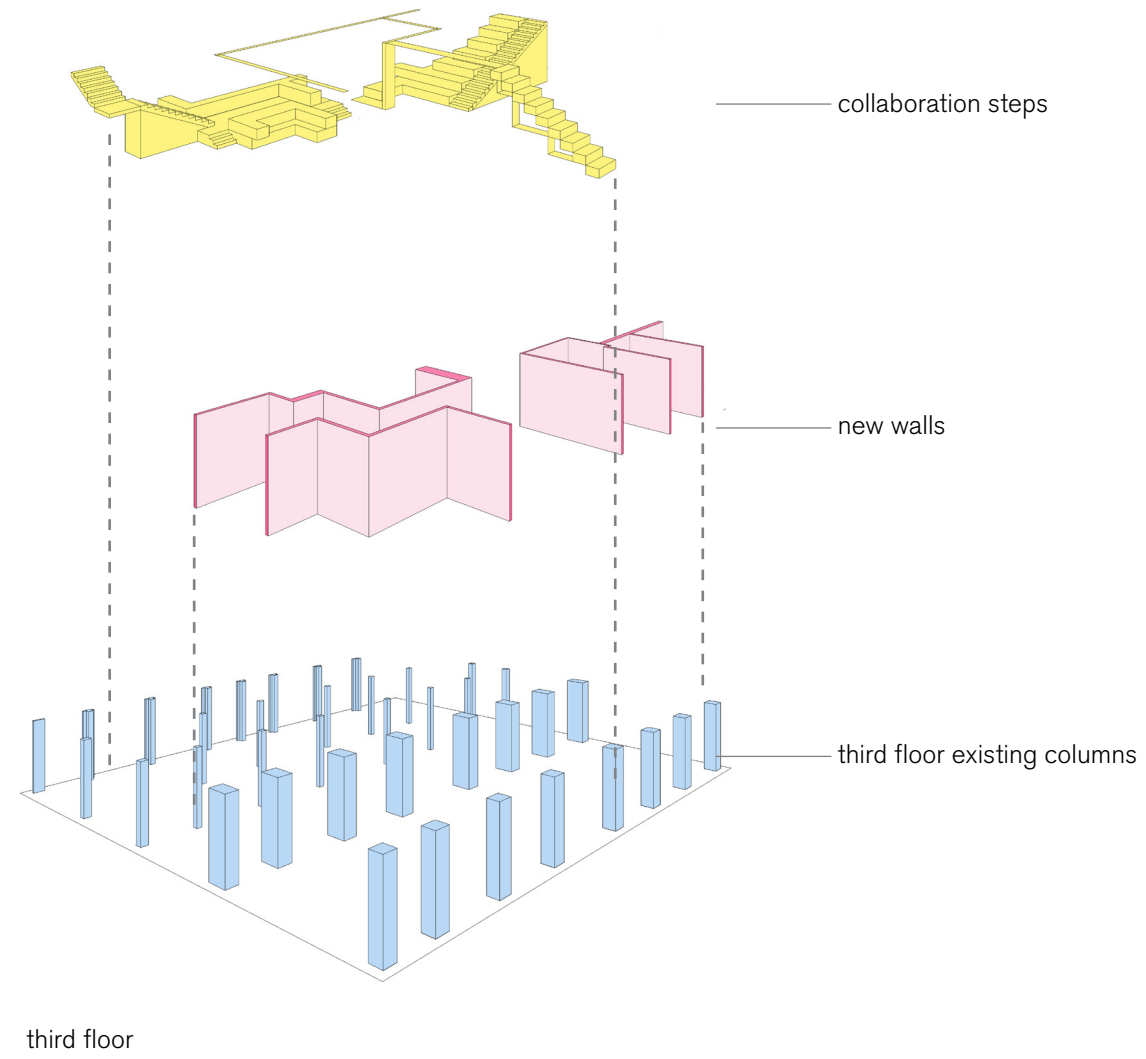
Layout-2 opens the panels to outside to invite designers to meet each other and share ideas.



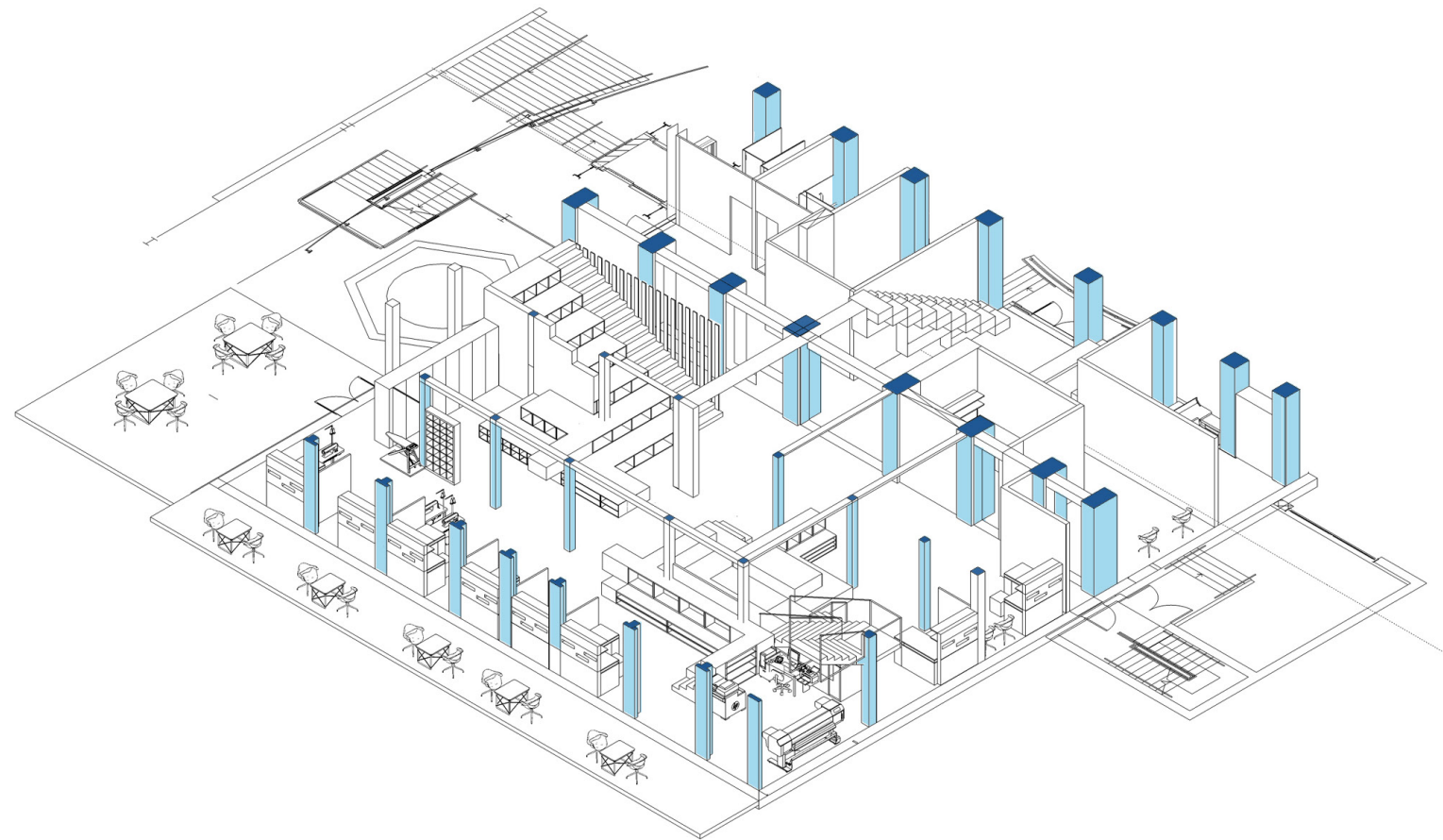
layout-4



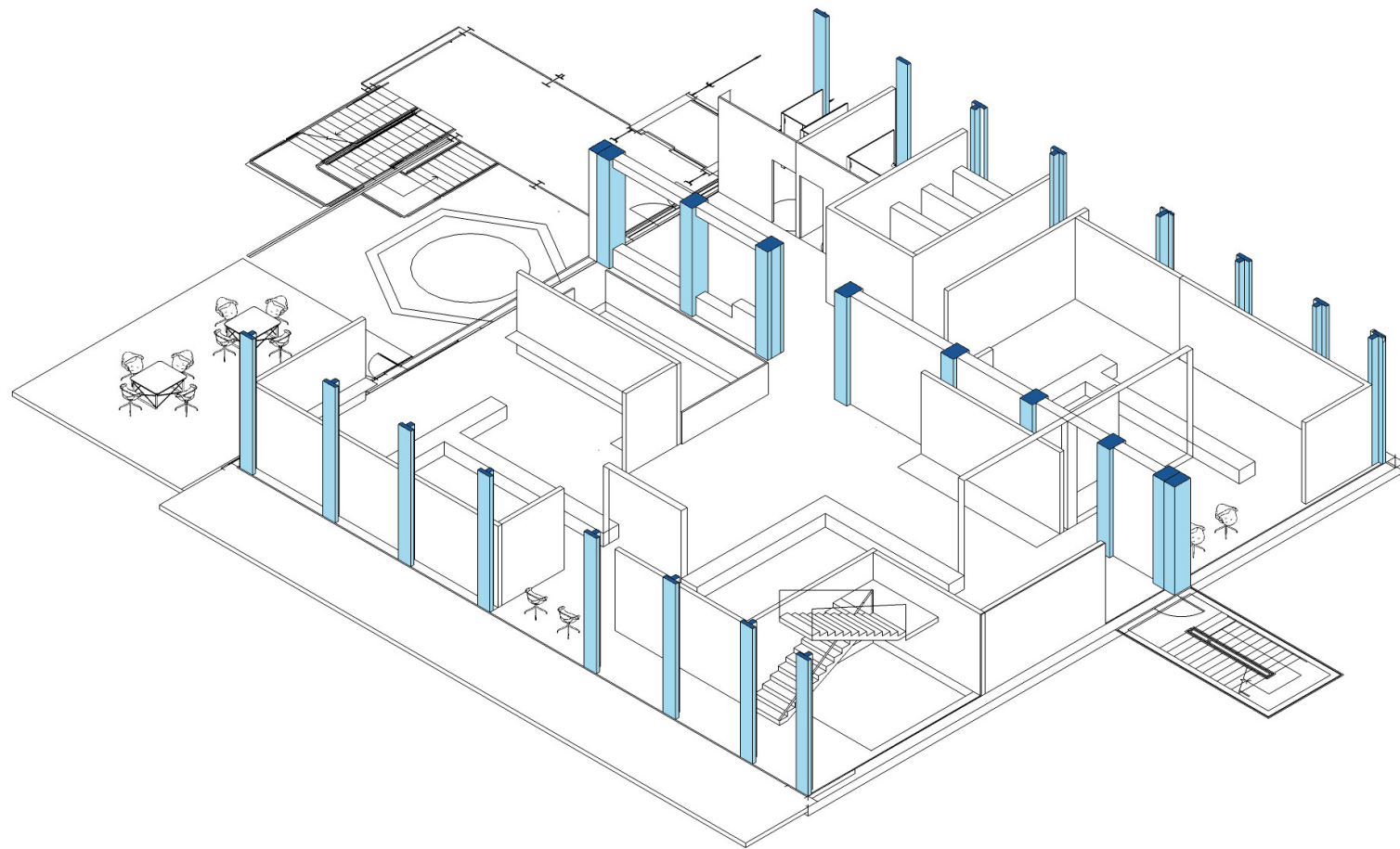
Layout-4 rearranges all movable pin-up panels to create a flexible critique space for designers to present their works and hear feedback from other people.



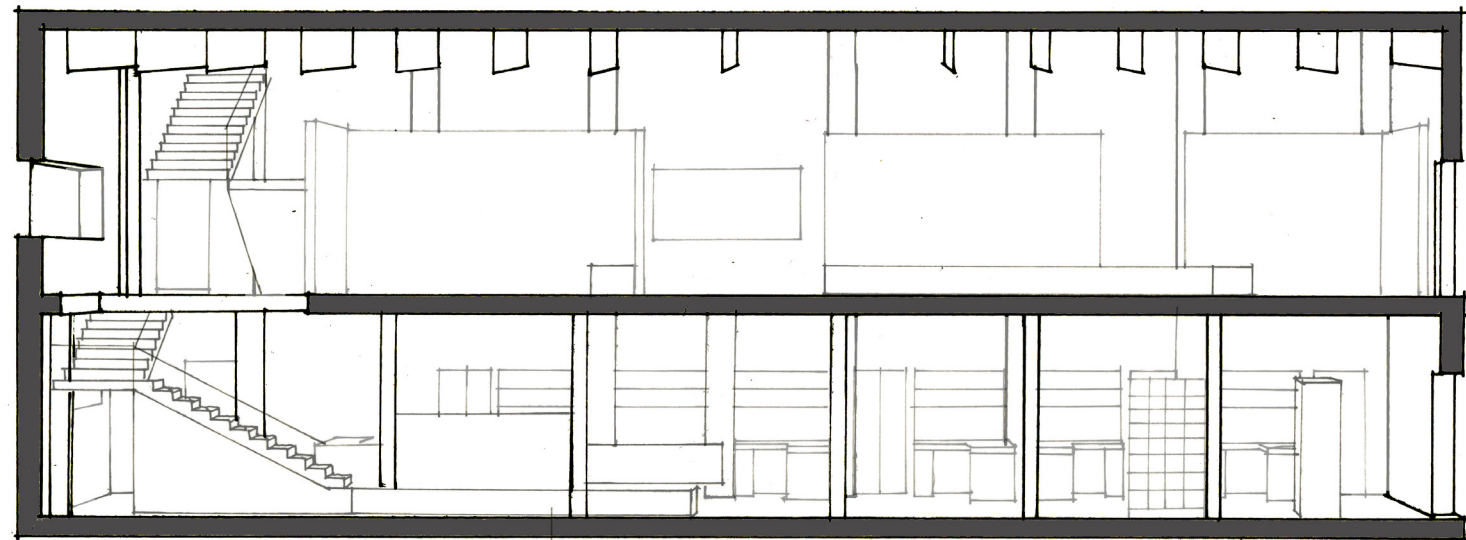
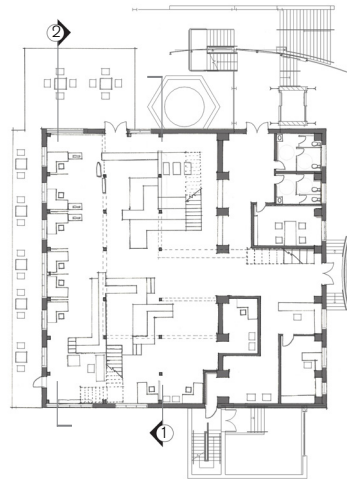




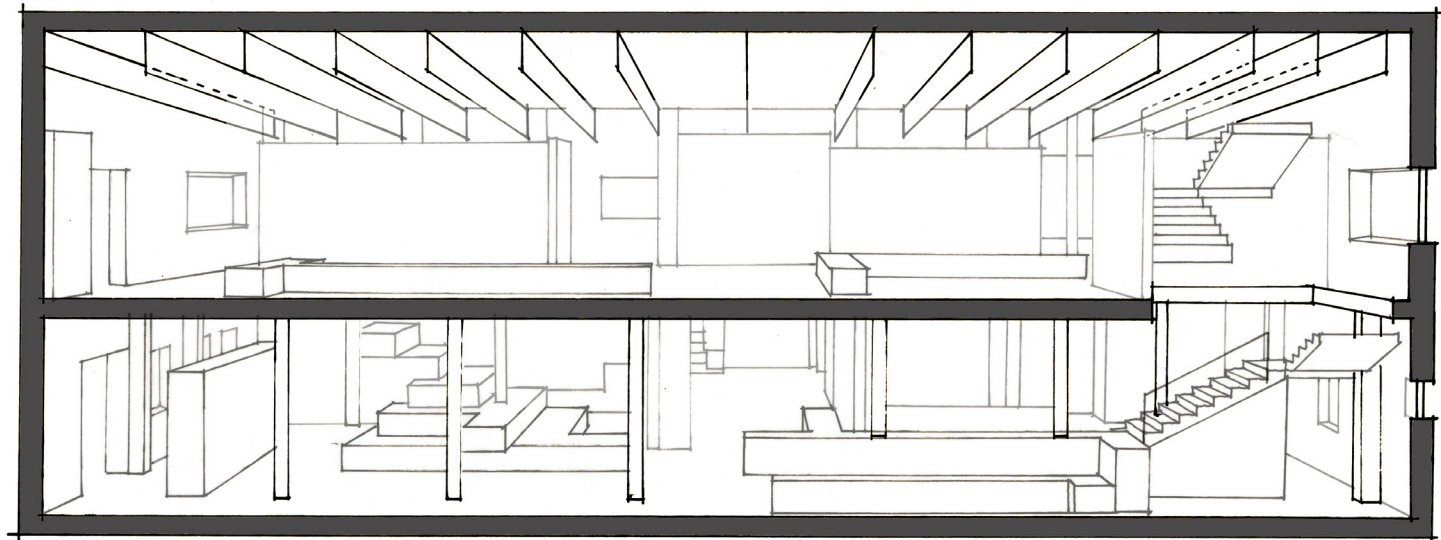
third floor



fourth floor

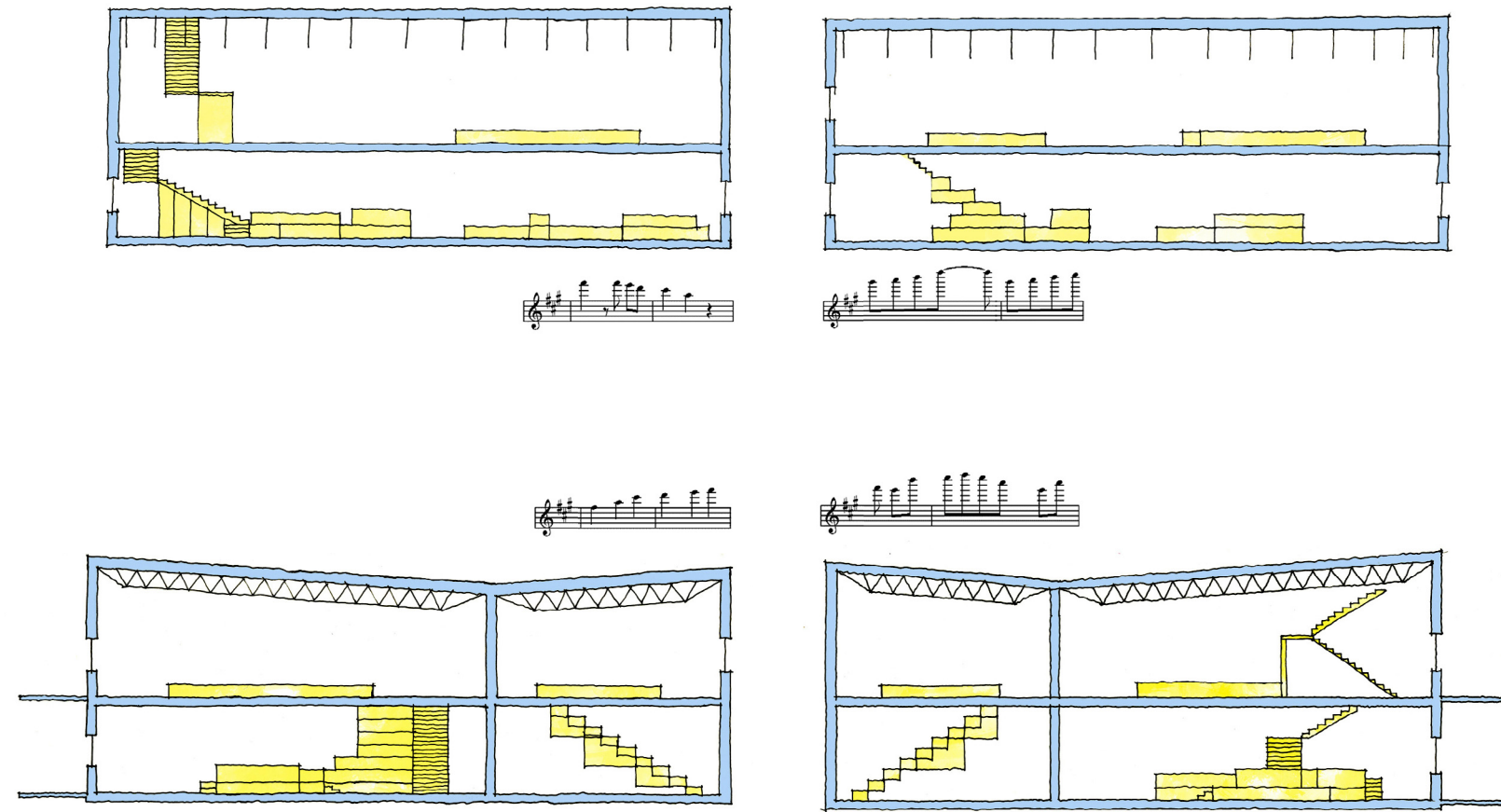


1. section looking west



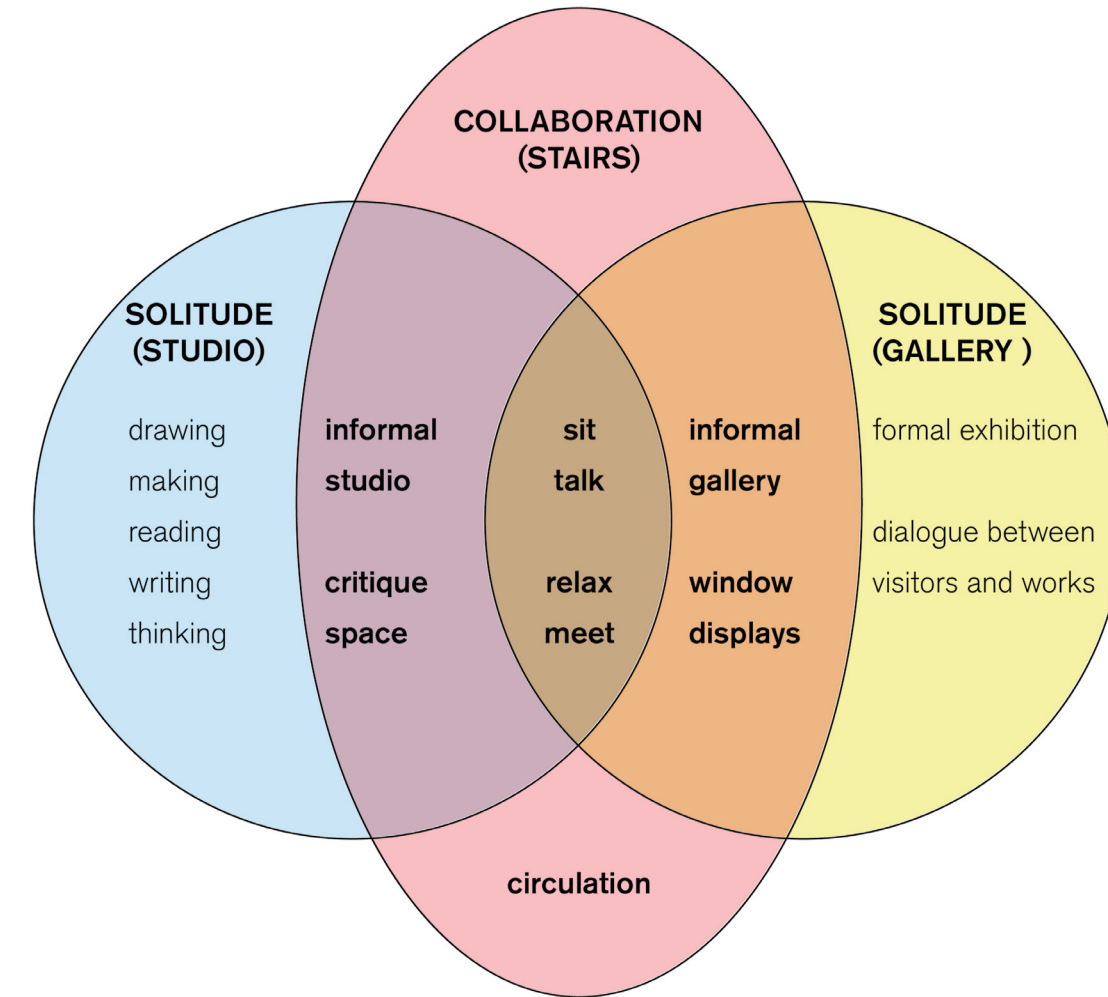
2. section looking east

# section "rhythm"



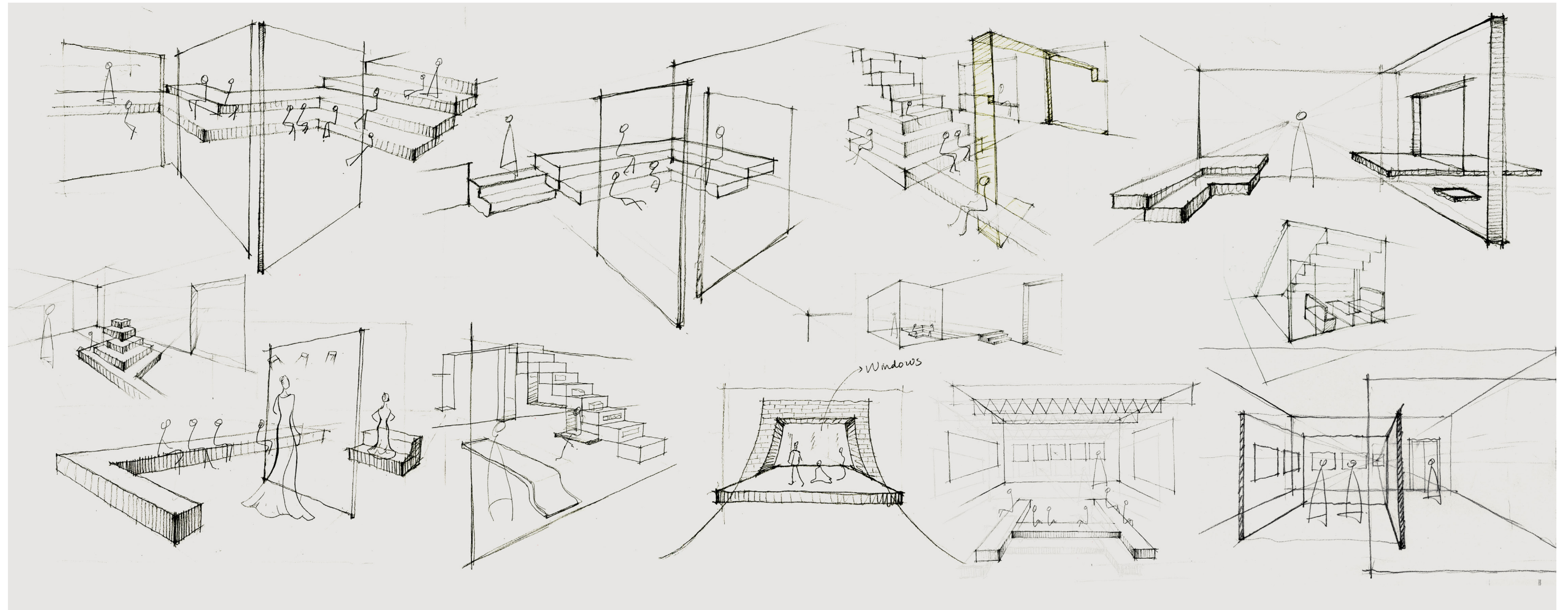
Collaboration steps play symphonies in the space according to their different heights.

# summary of space planning

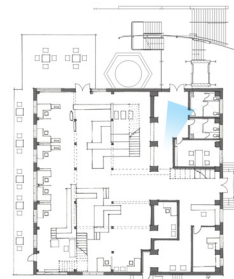




## 06. design development

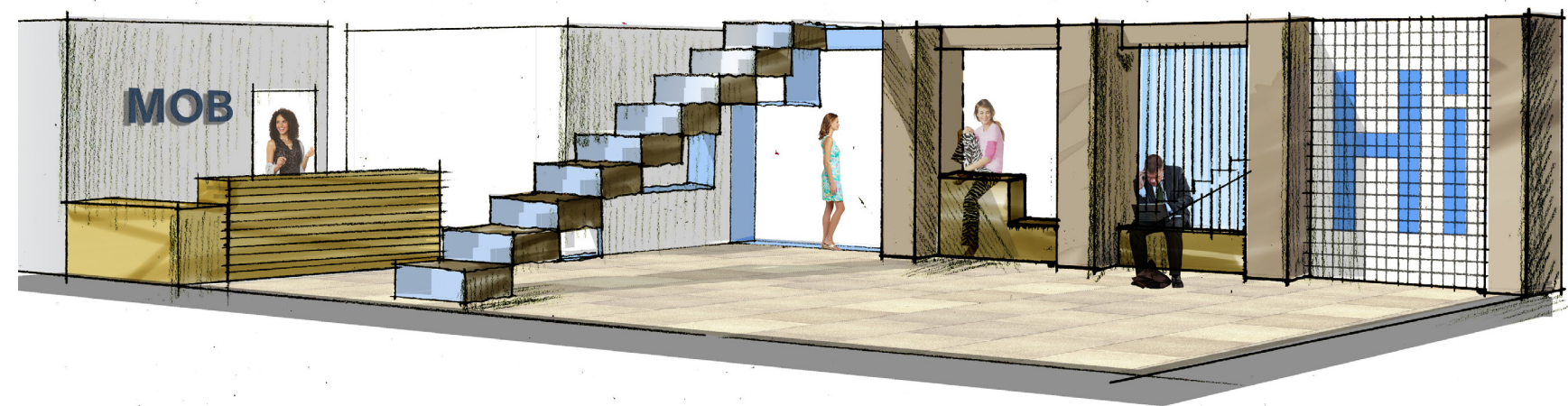
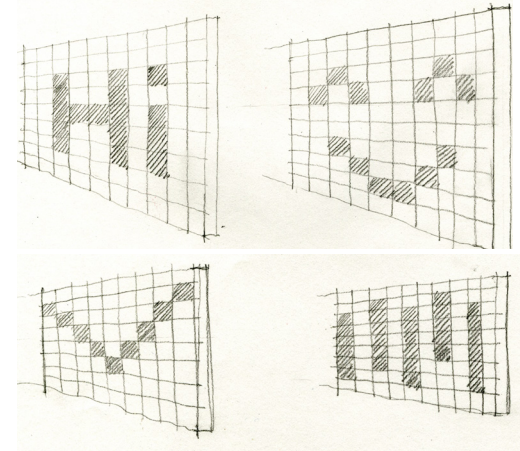




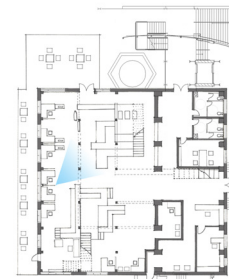


3rd floor key plan

When people enter the space from the main entrance, they will see the reception desk and display stairs showing MOB2030 recent design works. If people enter from the right entrance, the welcoming wall will catch their eyes through its changeable signs and colors.



entrance



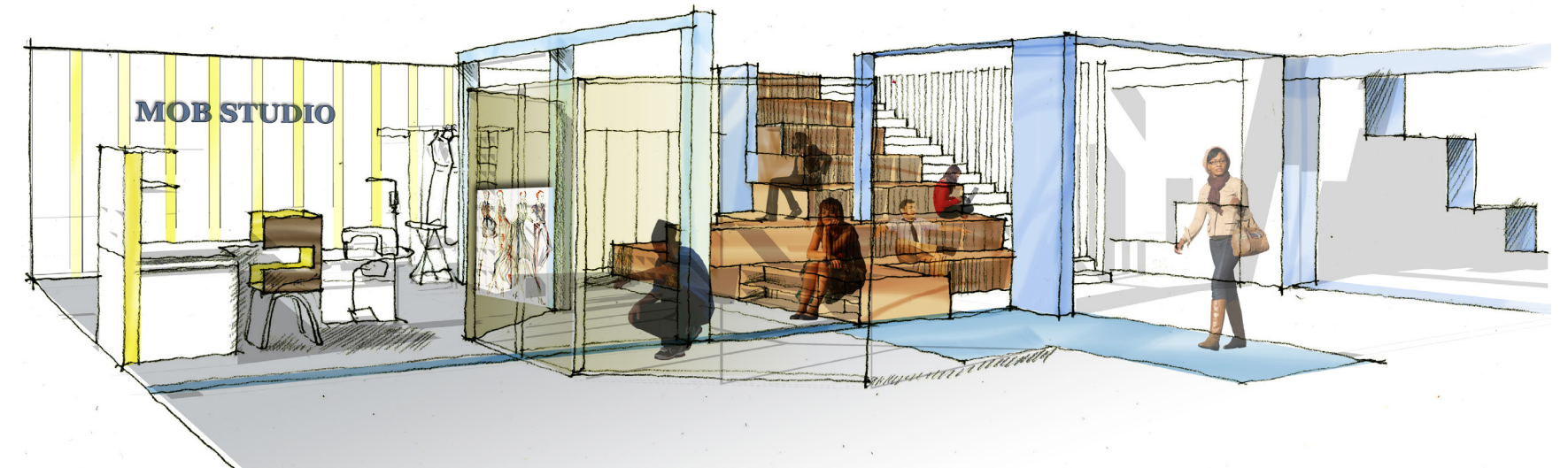
3rd floor key plan

After people enter the studio, the collaboration steps are the most active element in the space, providing people an opportunity to work, meet or critique on the stairs.



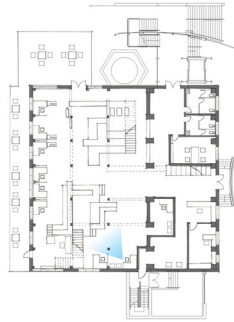
6.1

GiBooth - Studio Chair  
Designer - Jakob Gomez



fashion design studio / central stairs





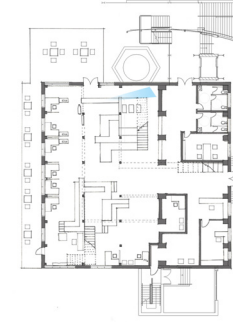
3rd floor key plan

The graphic design studio's critique space is smaller than the central one. It is quieter and more concentrated, therefore suitable for small group formal critiques. The printing room under the collaboration steps is shared by all studios.



6.2

CCi Cart - Studio Pin-Up Boards  
Designer - Thomas Parel



3rd floor key plan

The lounge under the stairs is a private space with a low ceiling height and small square footage. Designers can have a nap here or have an intimate conversation.

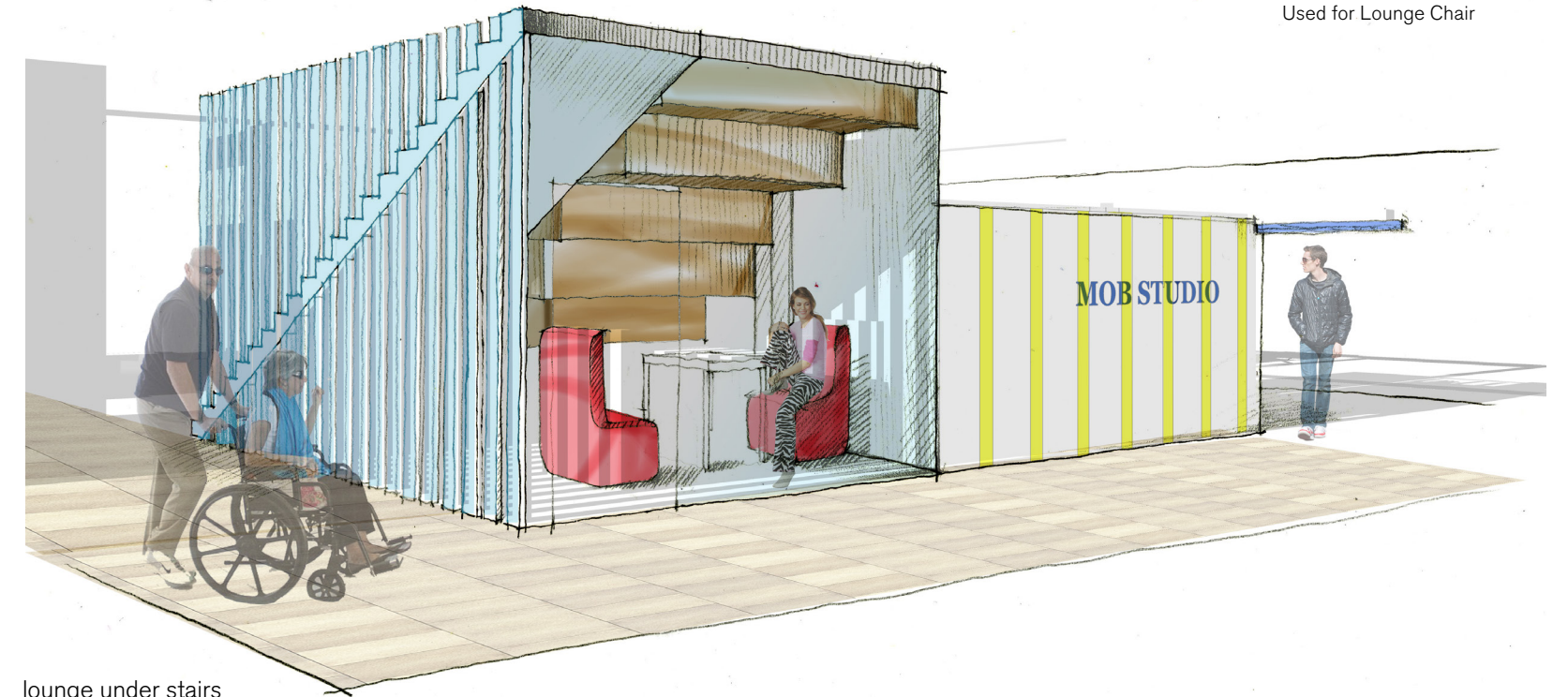


6.3

Lexington Mini Booth  
Used for Lounge Chair

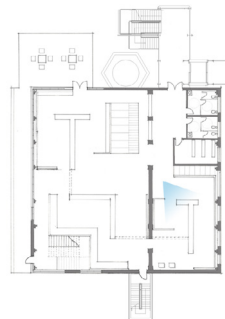


graphic design studio



lounge under stairs





4th floor key plan

The graphic design gallery has flat walls to show 2-D works. There are also computer stations available to present their digital works. Visitors can sit alone or talk with others while seated on T - and L - shaped benches.

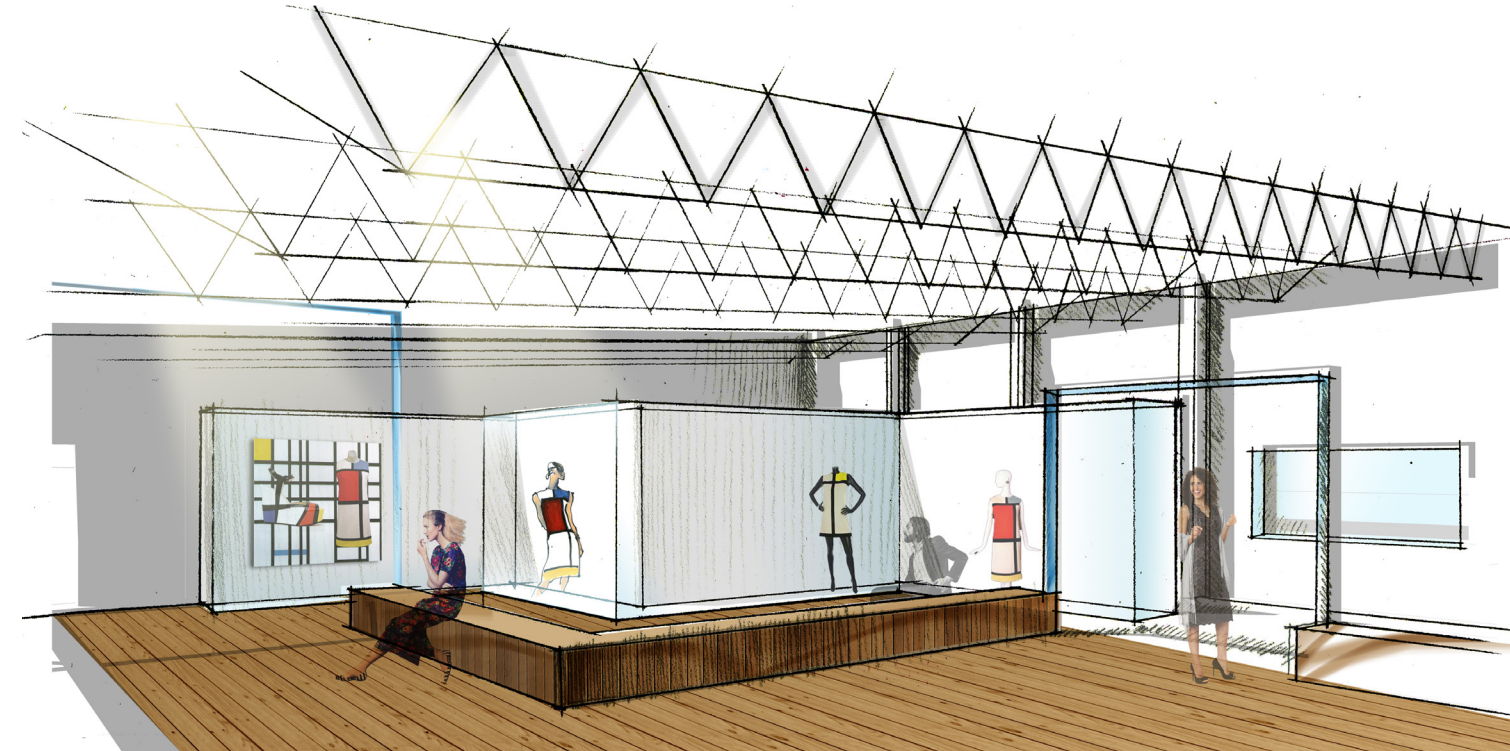


graphic design gallery



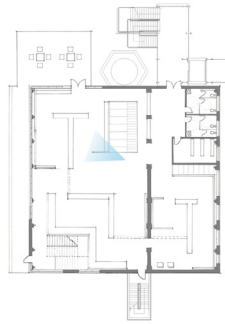
4th floor key plan

The fashion design gallery has showcases to display their clothing and dress forms. Every fashion show has a unique style or language so we can further decorate the window display space to meet those specific styles.



fashion design gallery





4th floor key plan

The interior design gallery has different heights of shelves to display models. Alternately, students can place models on the collaboration steps, transforming it into an informal gallery. The space has plenty of natural light from skylights, which create changing shadows in the space.



interior design gallery

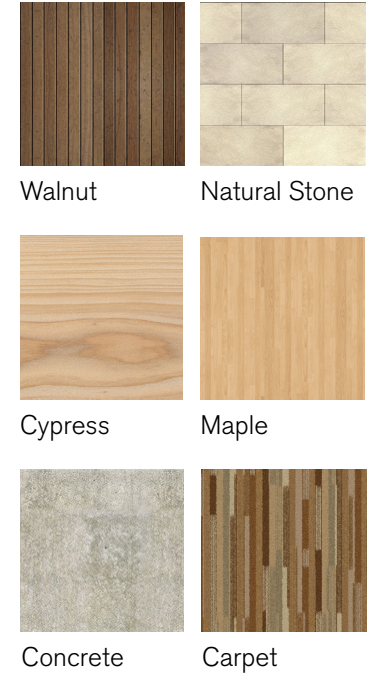
## material palette



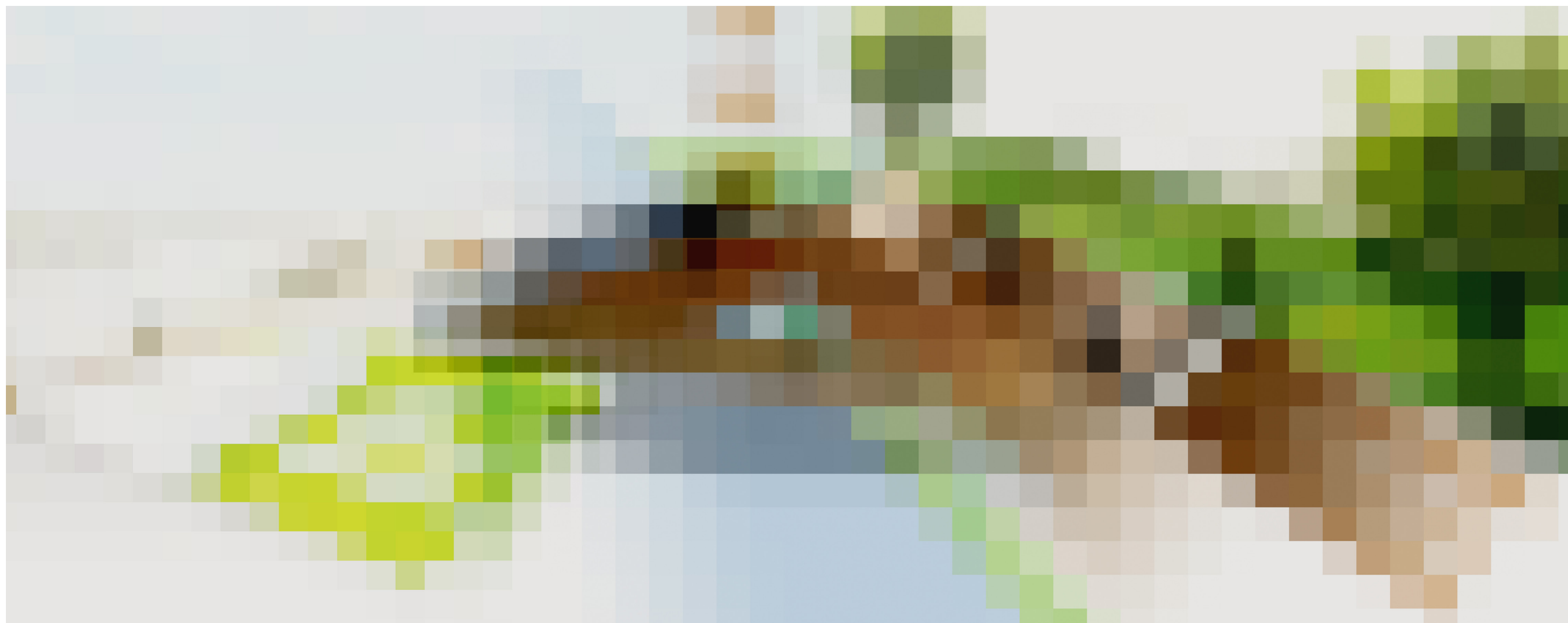
3rd floor



4th floor



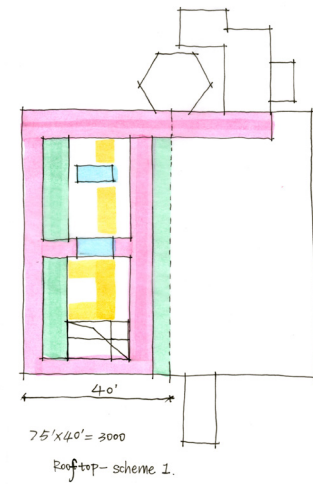
## 07. landscape development



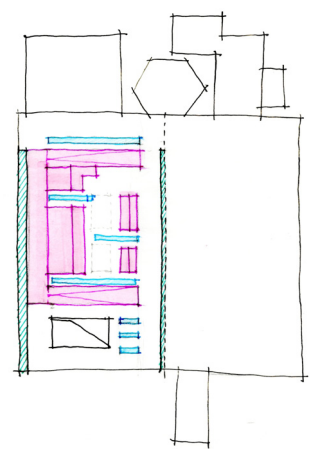
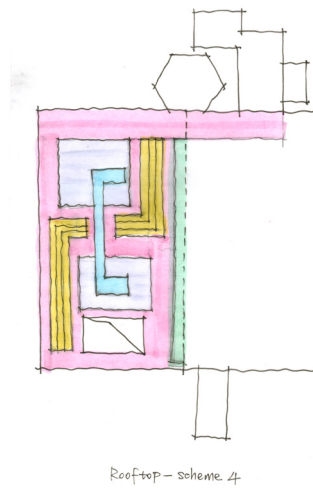
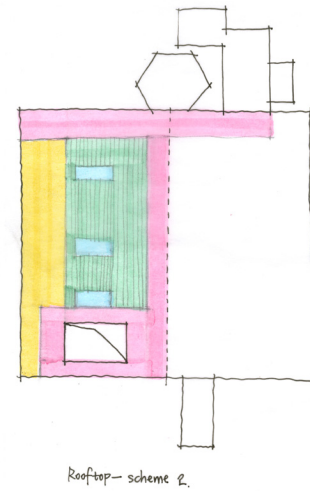
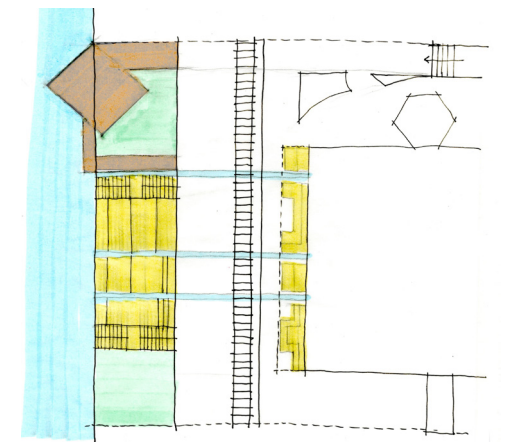
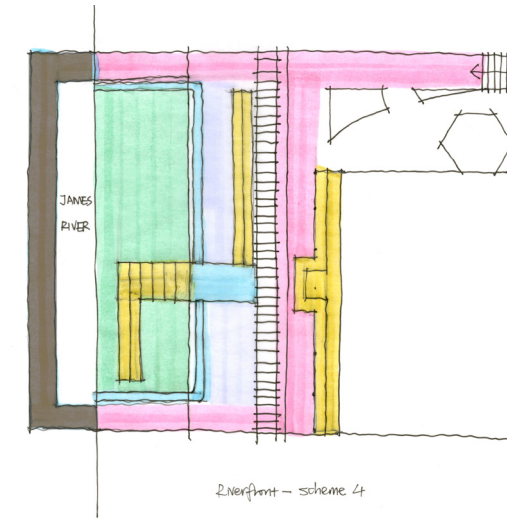
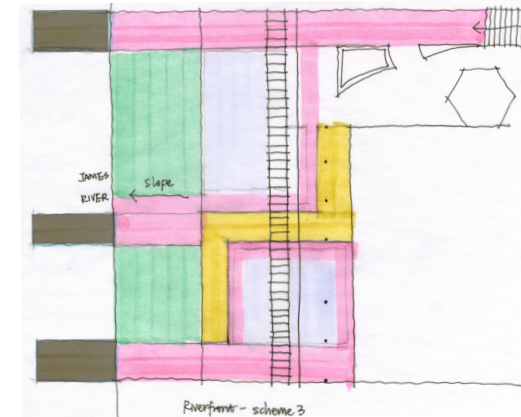
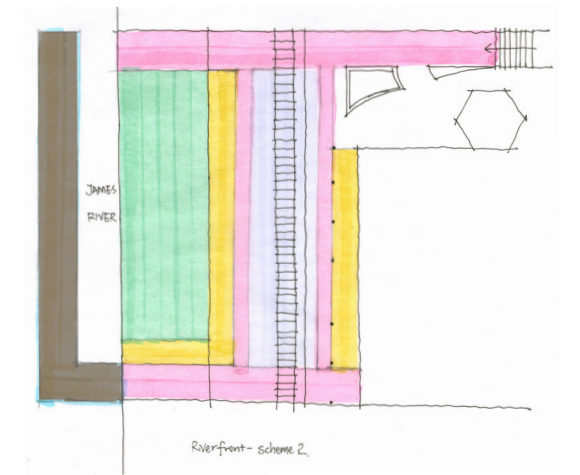
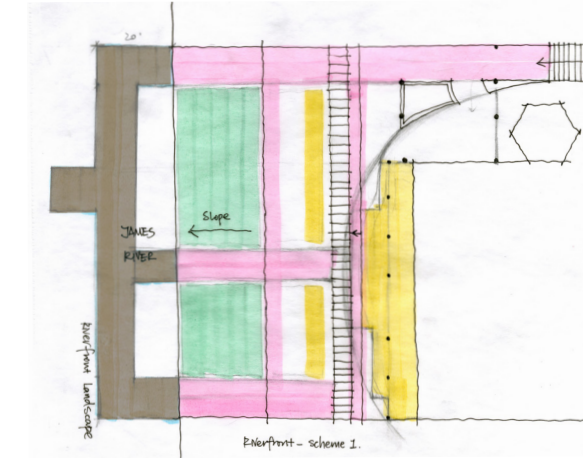


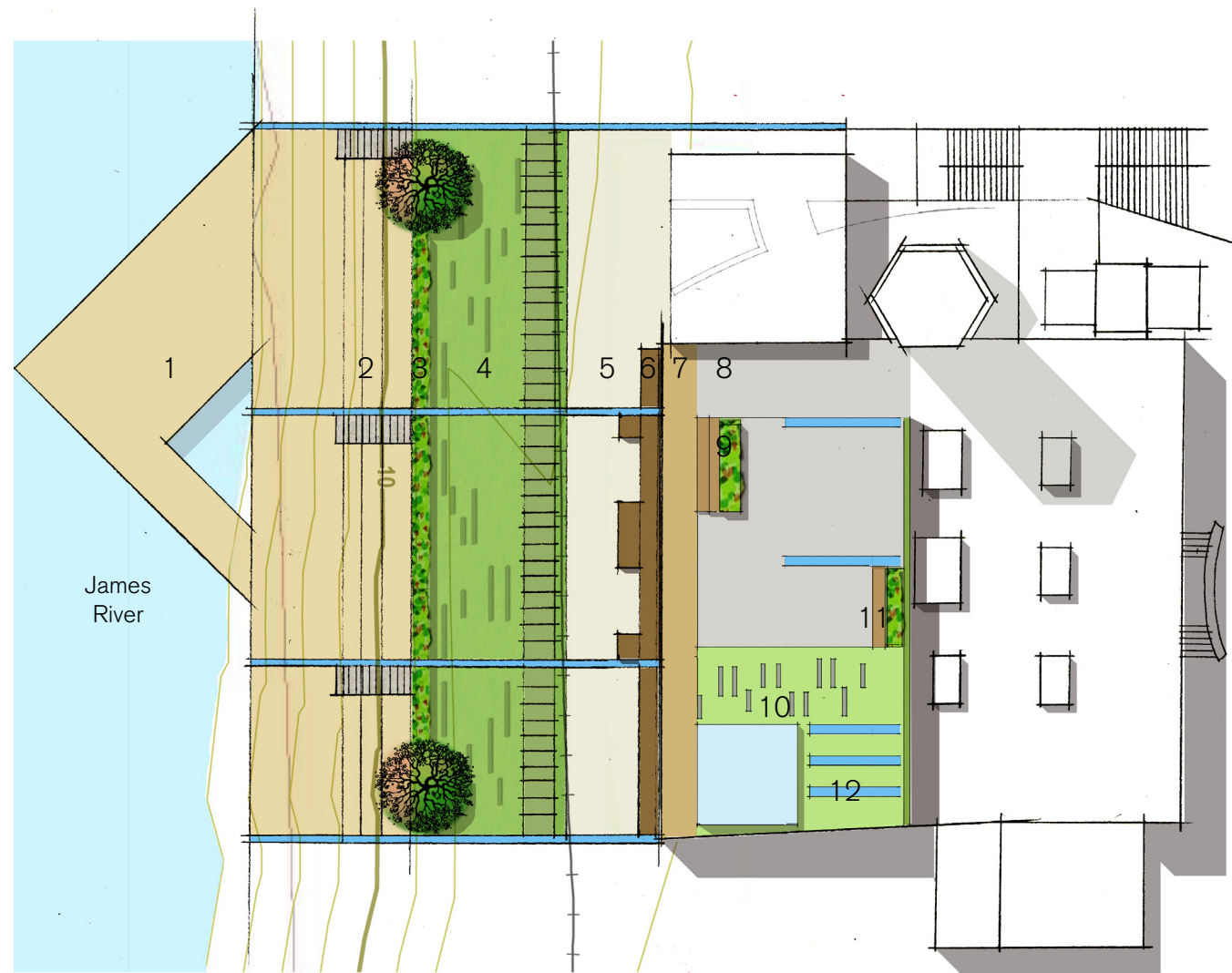
Rooftop - scheme 2.

The waterfront and rooftop landscape schemes find multiple ways to discover relationships between land and river, to organize the two landscapes, and to blur the boundaries between interior space and the landscape.



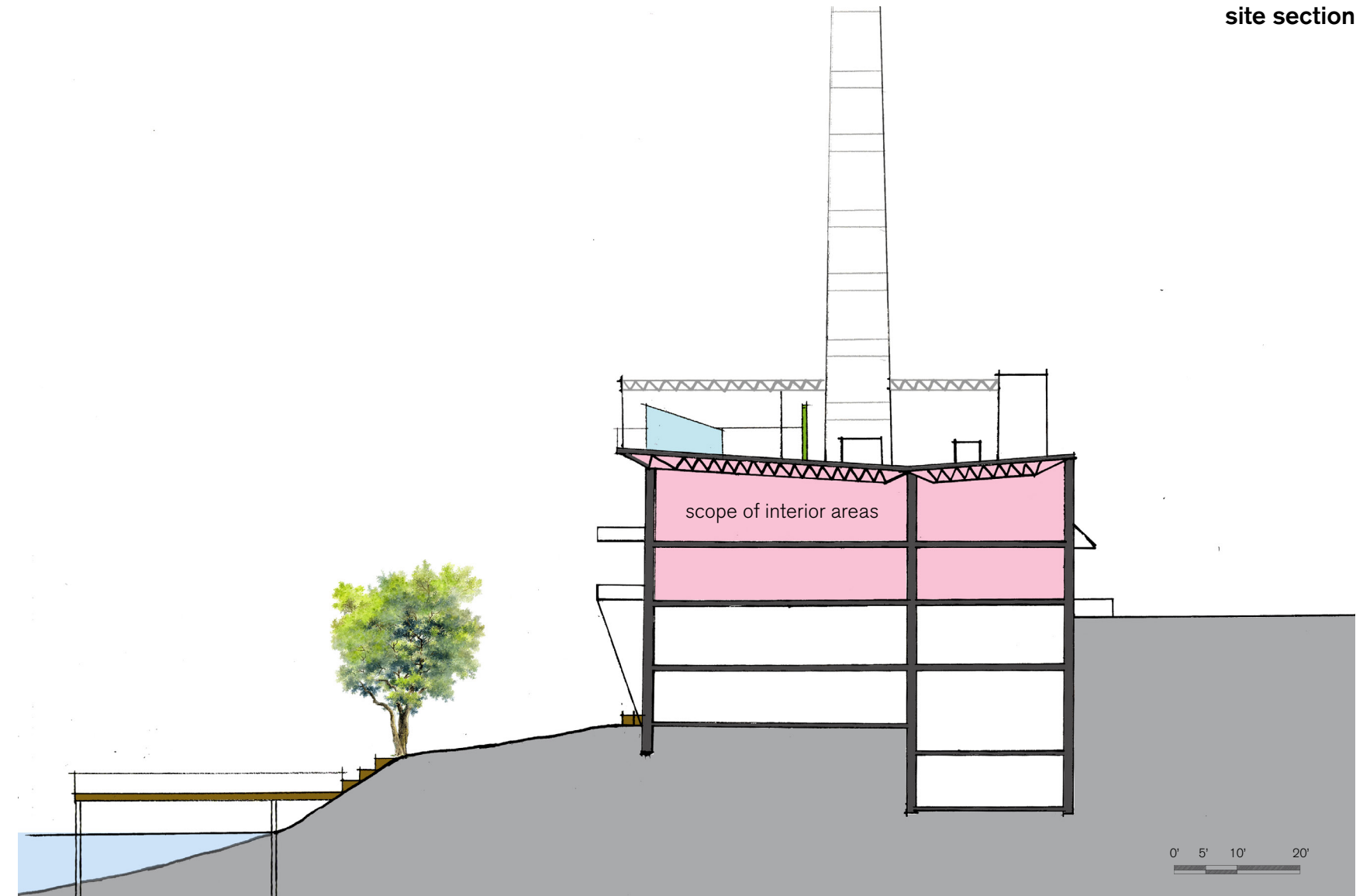
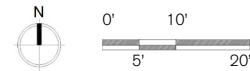
9. 2. circulation  
66. 兰. skylight / bridge  
58. 绿. garden (plant)  
44 黄. stairs (bench)  
75 紫. (plaza)

[illegible]



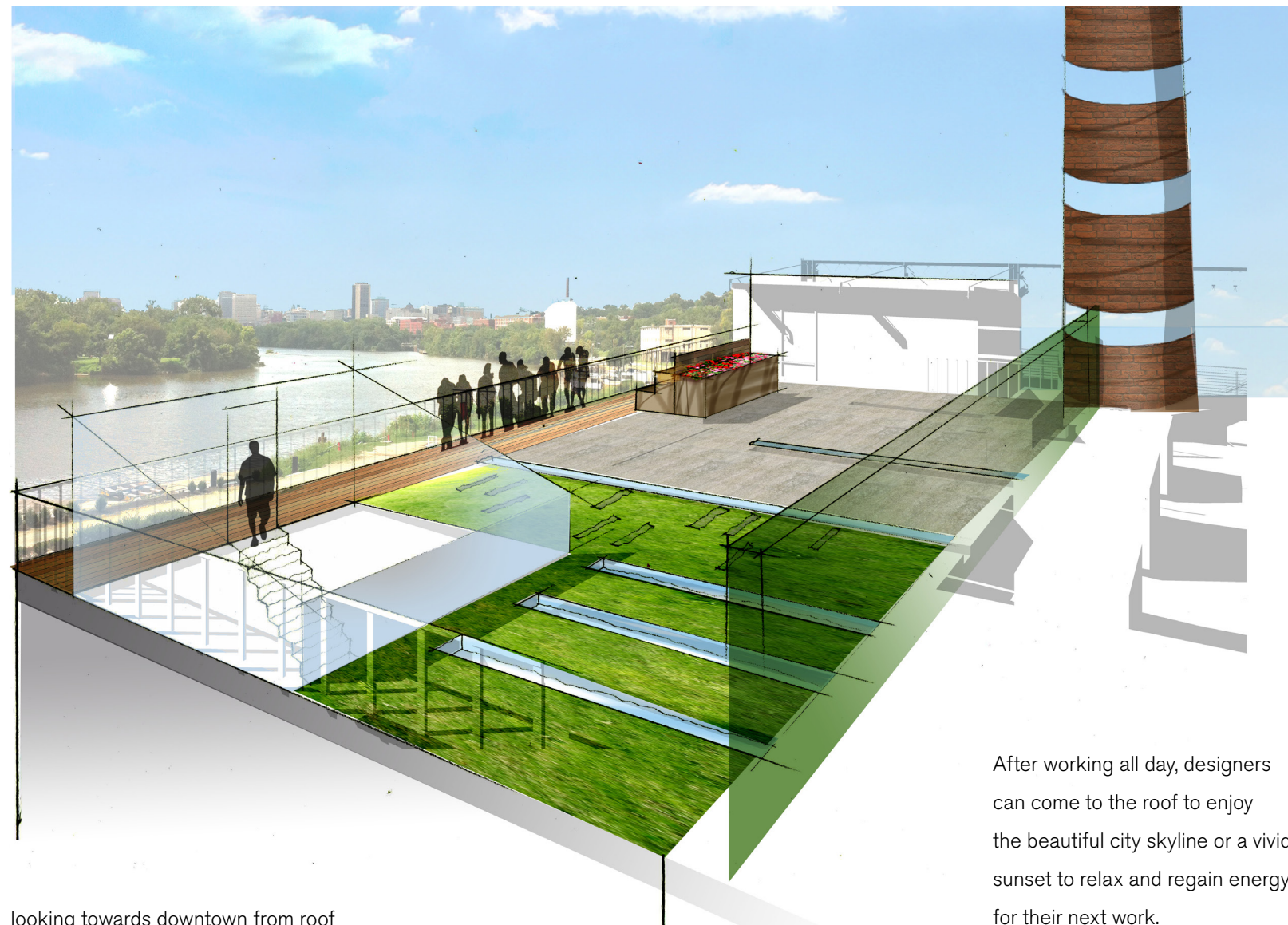
site plan

- 1 bridge
- 2 waterfront stairs
- 3 hedge
- 4 lawn
- 5 concrete walkway
- 6 covered stairs
- 7 roof viewing
- 8 concrete terrace
- 9 planter
- 10 grass
- 11 roof stairs
- 12 water feature



site section

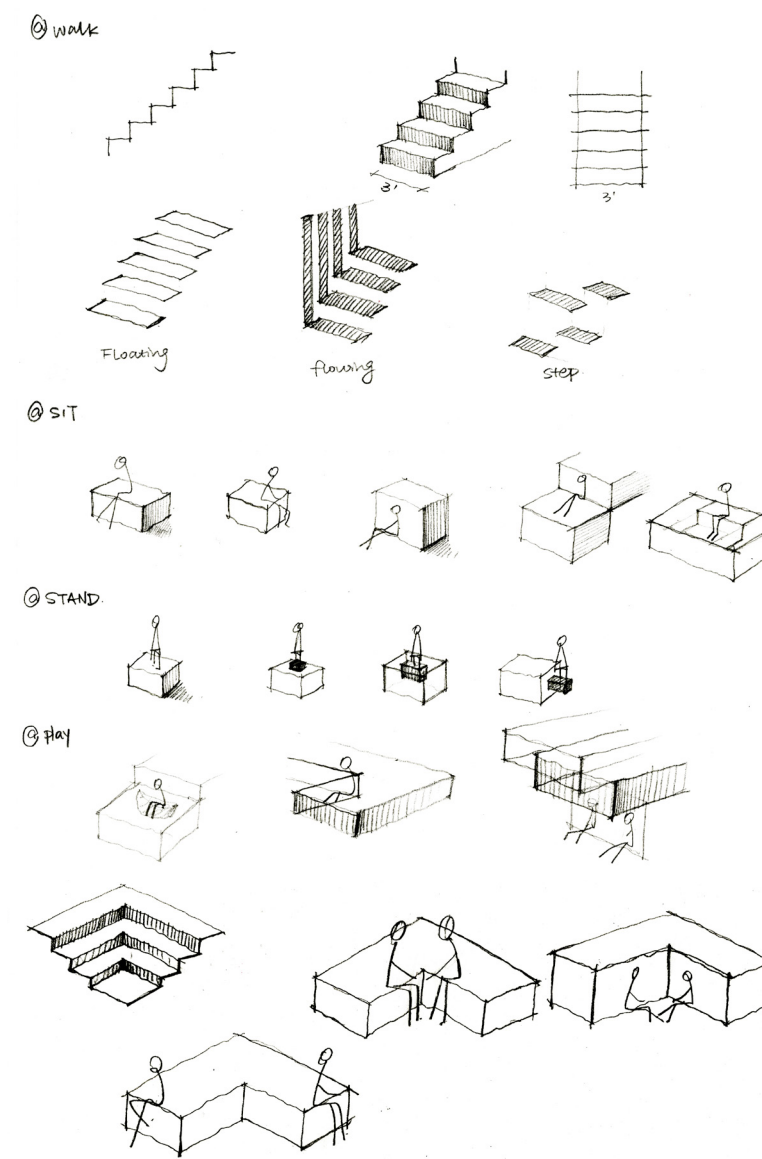




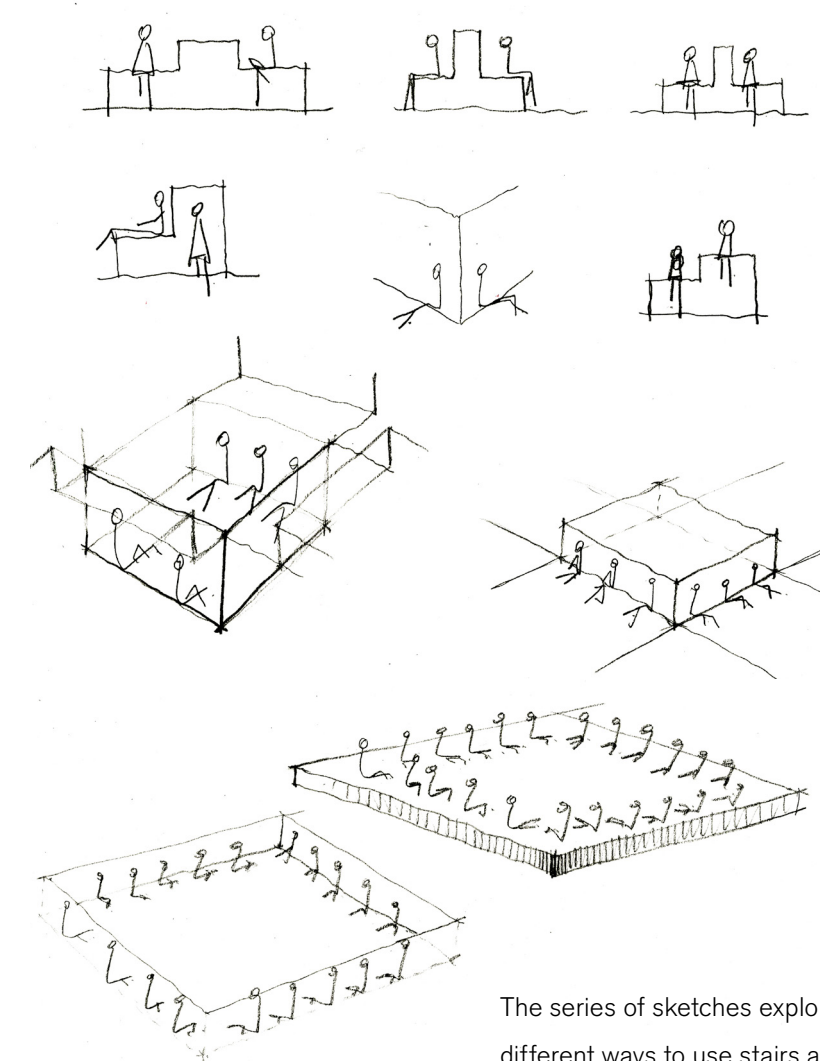
looking towards downtown from roof

## view

After working all day, designers can come to the roof to enjoy the beautiful city skyline or a vivid sunset to relax and regain energy for their next work.



## sketches

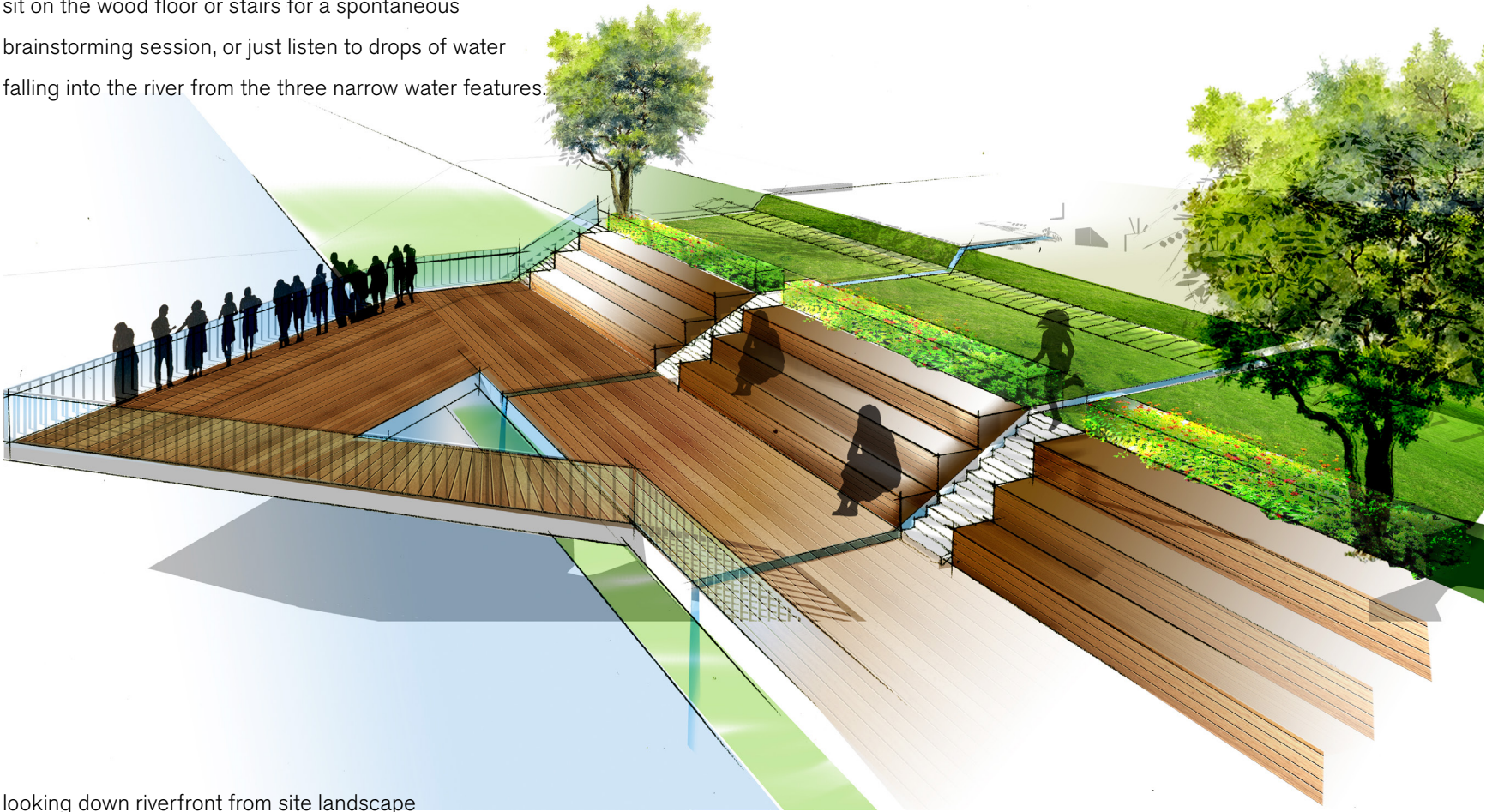


The series of sketches explore different ways to use stairs as a collaboration area.



view

On a sunny day, designers can gather on the bridge, sit on the wood floor or stairs for a spontaneous brainstorming session, or just listen to drops of water falling into the river from the three narrow water features.



looking down riverfront from site landscape

plants



7.1  
sweet gum  
waterfront trees  
30-40 ft height  
20-30 ft spread

The glossy, green, star-shaped leaves of the sweet gum are one of its most ornamental features, especially when they take on beautiful fall colors of yellow, orange, and red.



7.2  
boxwood  
waterfront shrubs  
3 ft height  
5 ft spread

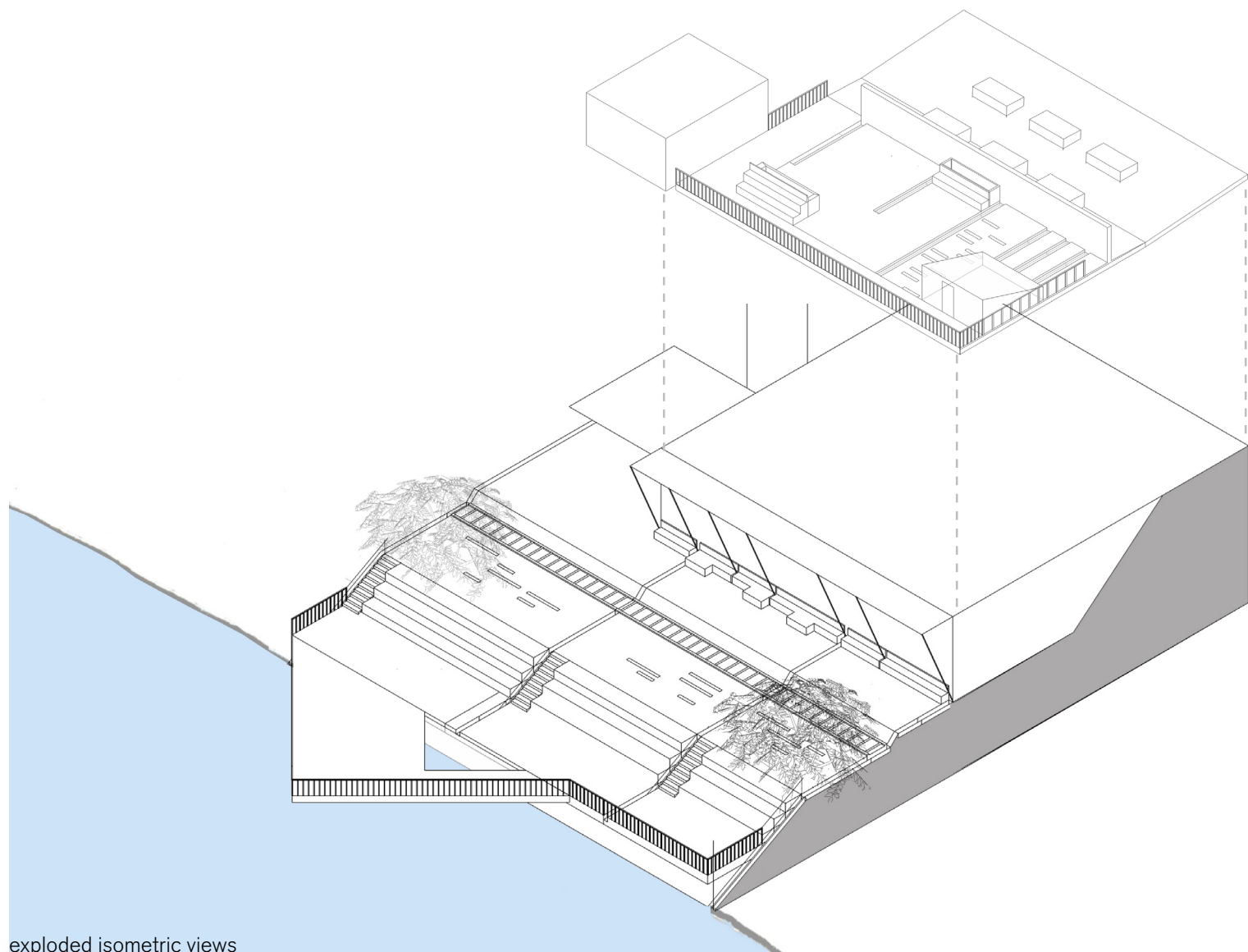
These are slow-growing evergreen shrubs. Boxwoods can take the shape of a neat mound. It is used to define the path and waterfront stairs.



7.3  
perennial ryegrass  
waterfront grass  
mowing height: 1-1/2" - 2-1/2"

The ryegrasses are best adapted to moist, cool environments where temperatures are not extreme in the winter or summer.

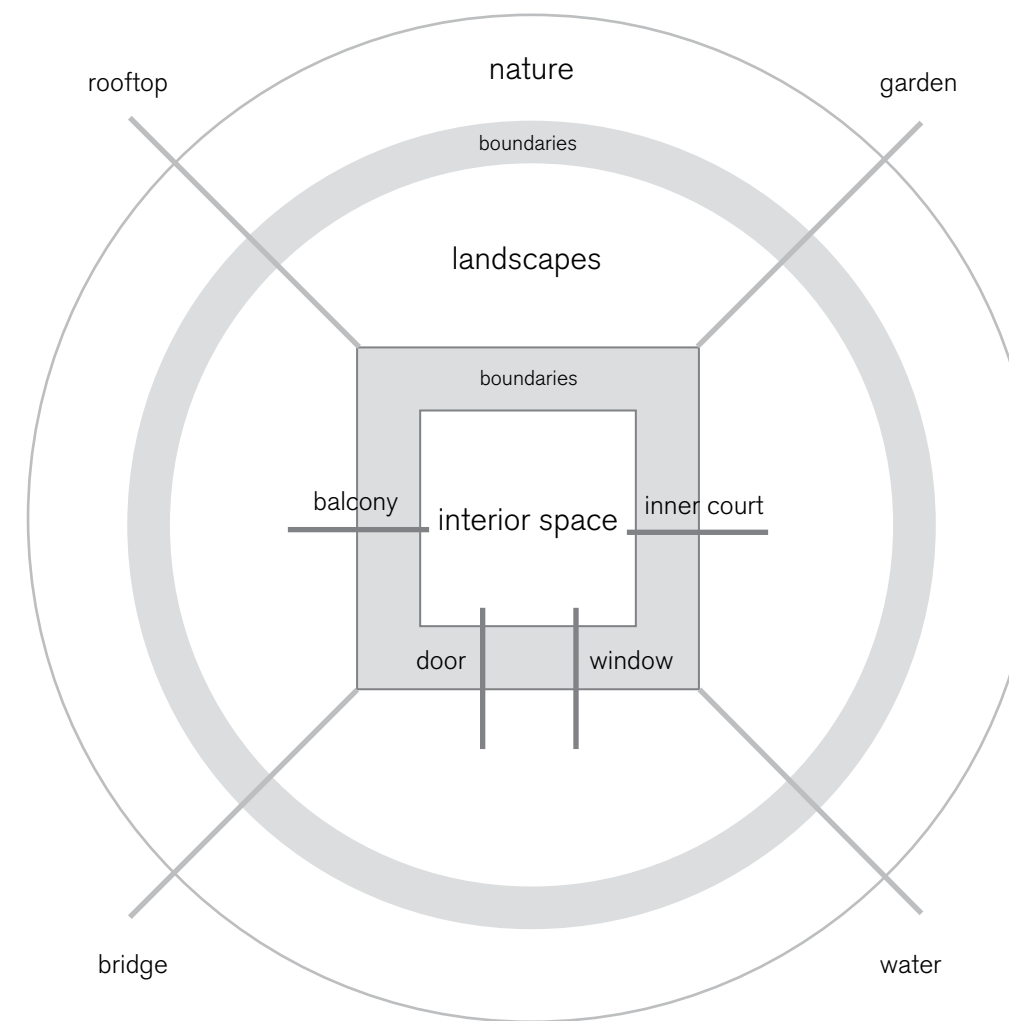




exploded isometric views

## view

## summary of landscape development



08. thesis show

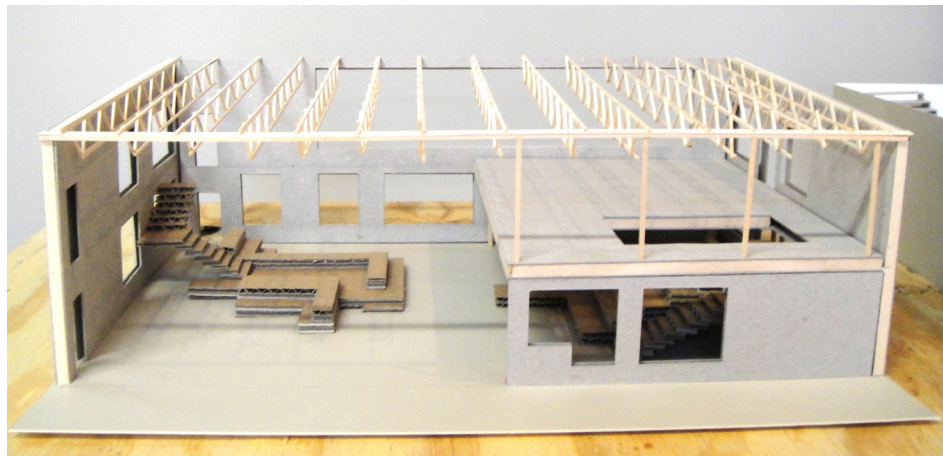
**seek interaction,  
find connection.**

Presentation of thesis work at Depot Gallery on April 25-May 18,2014.

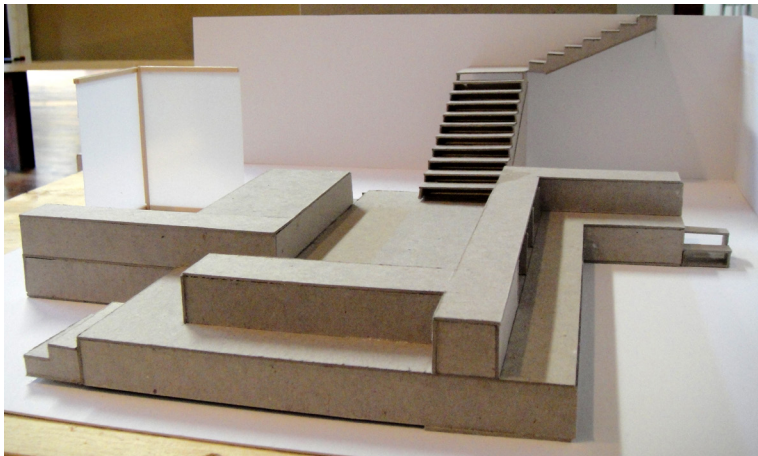
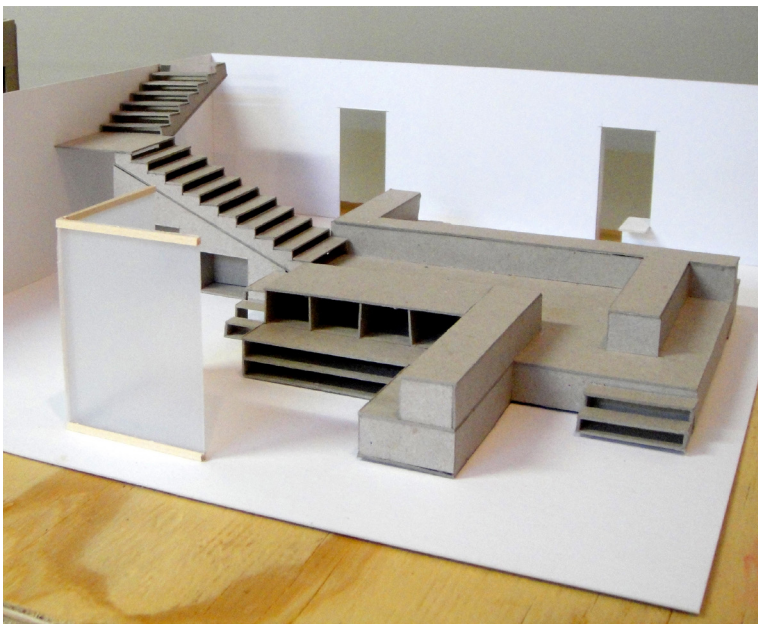








building model

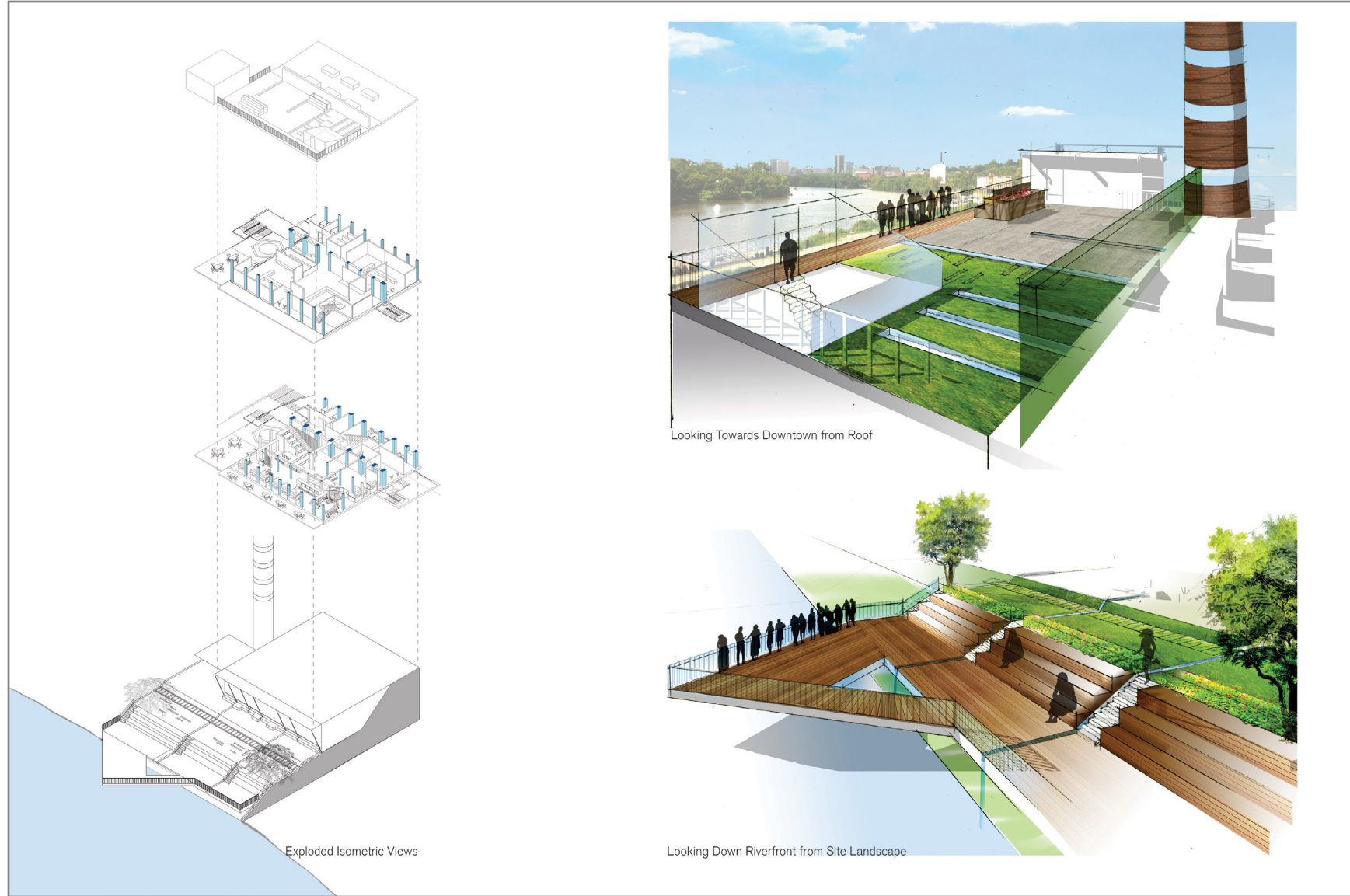
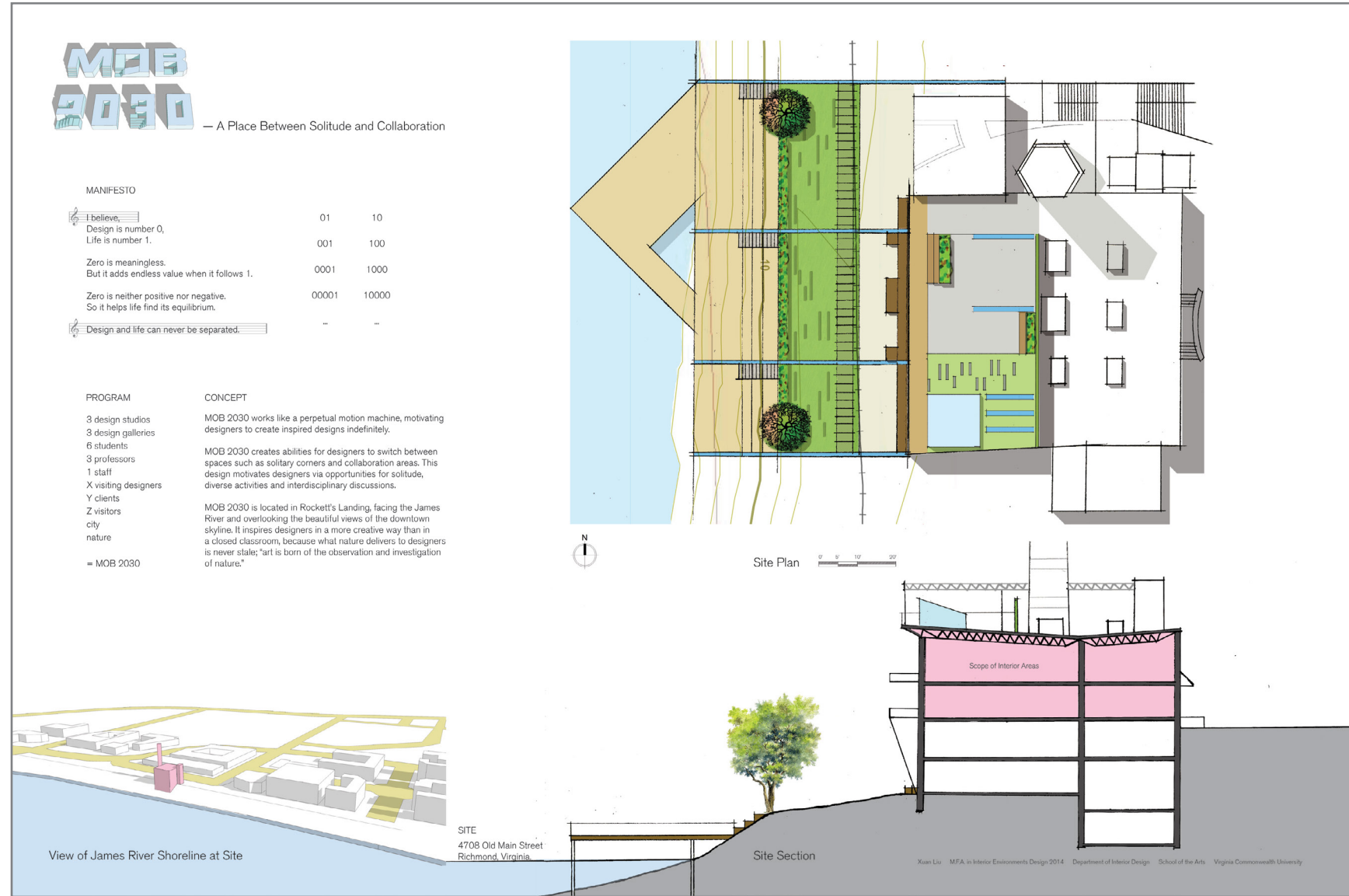


partial space model

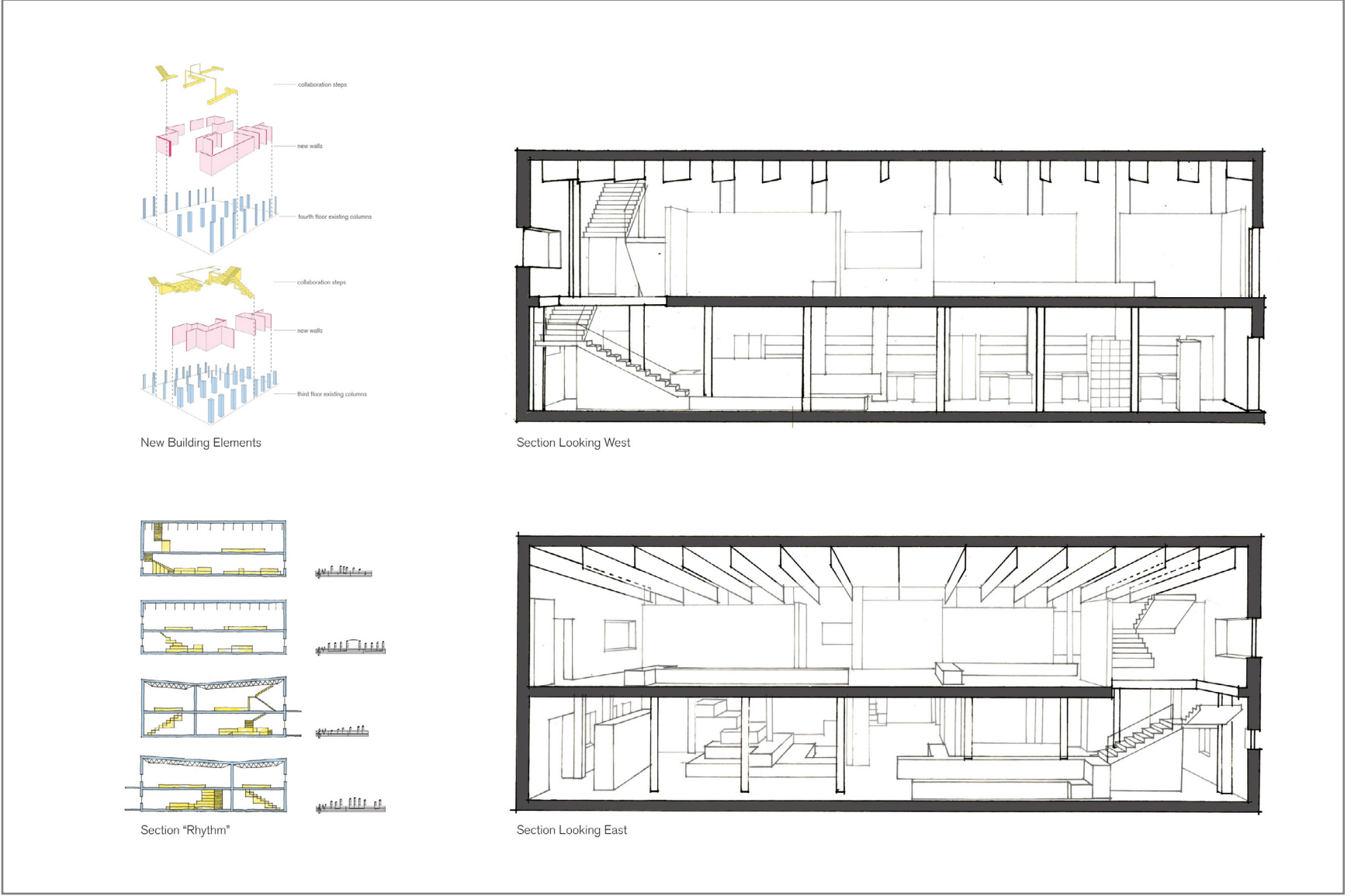
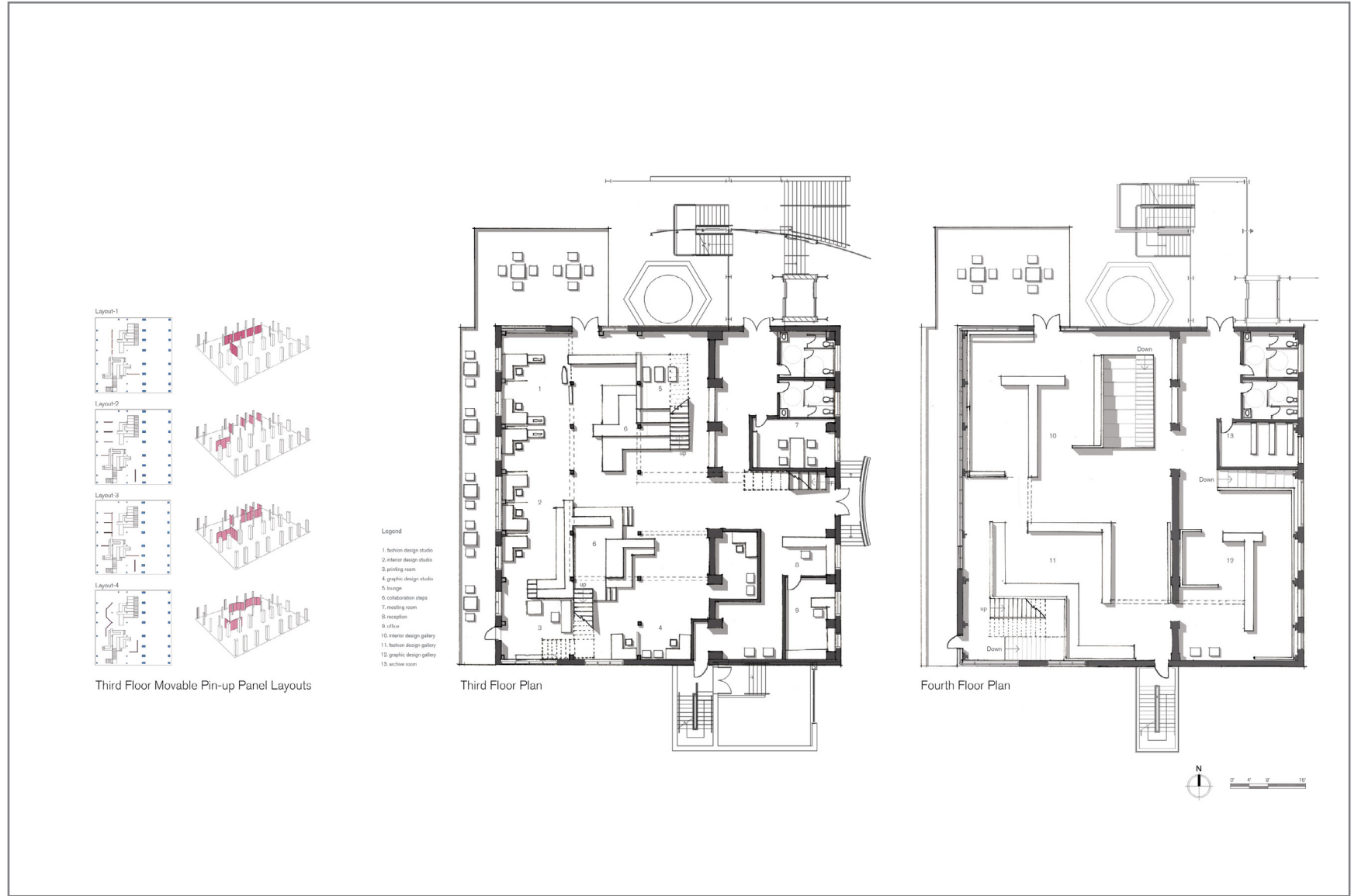






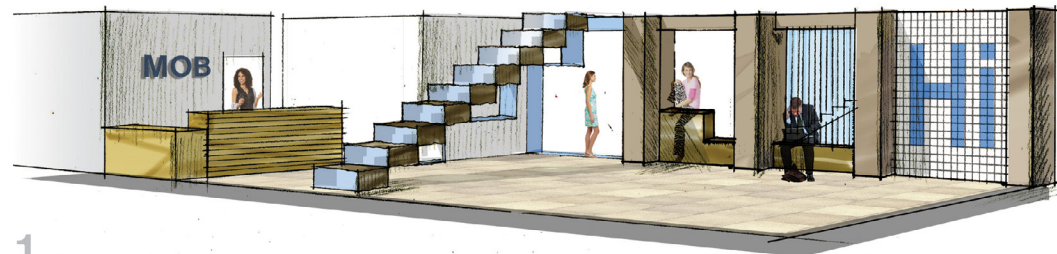




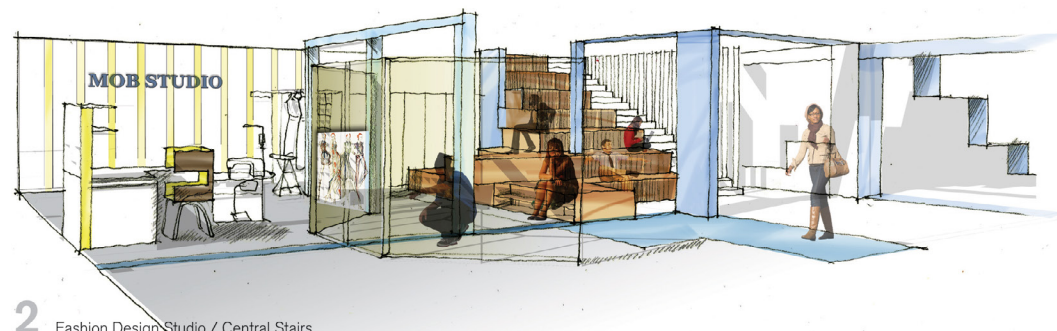




Third Floor Key Plan - MOB Studio



1 Entrance



2 Fashion Design Studio / Central Stairs



3 Lounge Under Stairs



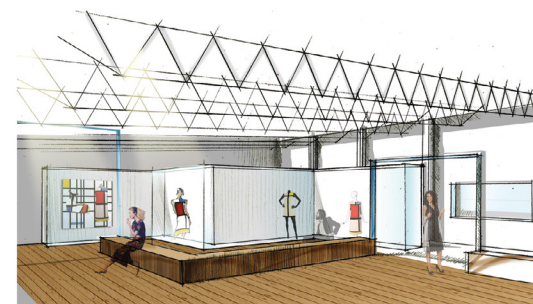
4 Graphic Design Studio



Fourth Floor Key Plan - MOB Gallery



1 Graphic Design Gallery



2 Fashion Design Gallery

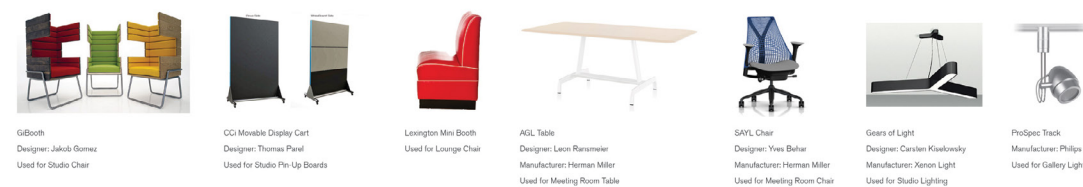


3 Interior Design Gallery

#### Third and Fourth Floor Material Palette



#### Furniture, Fixture and Equipment





09. works cited

IMAGES	Page 13	1.1 perpetual motion machine <a href="http://en.wikipedia.org/wiki/Perpetual_motion">http://en.wikipedia.org/wiki/Perpetual_motion</a>
	Page 20	2.1 Chapel of St. Ignatius <a href="http://www.sfu.ca/~bheng/IAT%20233/chapel/">http://www.sfu.ca/~bheng/IAT%20233/chapel/</a>
	Page 21	2.2 seven bottles of light watercolor <a href="http://www.stevenholl.com/project-detail.php?id=40">http://www.stevenholl.com/project-detail.php?id=40</a>
	Page 24	2.3 Chapel of St. Ignatius door handle <a href="https://www.flickr.com/photos/patrickw/3353728291/in/photostream/">https://www.flickr.com/photos/patrickw/3353728291/in/photostream/</a>
		2.4 Chapel of St. Ignatius door <a href="https://www.flickr.com/photos/penserose/3647899339/">https://www.flickr.com/photos/penserose/3647899339/</a>
	Page 25	2.5 Chapel of St. Ignatius interior space <a href="http://www.archdaily.com/115855/ad-classics-chapel-of-st-ignatius-steven-holl-architects/">http://www.archdaily.com/115855/ad-classics-chapel-of-st-ignatius-steven-holl-architects/</a>
		2.6 Chapel of St. Ignatius interior lighting <a href="http://www.archdaily.com/269251/steven-holl-interview-not-a-signature-architect-andrew-caruso/">http://www.archdaily.com/269251/steven-holl-interview-not-a-signature-architect-andrew-caruso/</a>
		2.7 Chapel of St. Ignatius interior lighting <a href="http://art-history-images.com/photo/978">http://art-history-images.com/photo/978</a>
	Page 26	2.8 national gallery of art site map <a href="http://www.nga.gov/content/ngaweb/visit/maps-and-information.html">http://www.nga.gov/content/ngaweb/visit/maps-and-information.html</a>
	Page 27	2.9 national gallery of art sketch <a href="http://www.nga.gov/collection/20th_design.shtm">http://www.nga.gov/collection/20th_design.shtm</a>
	Page 30	2.10 national gallery of art <a href="https://www.flickr.com/photos/43355952@N06/galleries/72157622795107425">https://www.flickr.com/photos/43355952@N06/galleries/72157622795107425</a>

\* All works not cited are by Xuan Liu

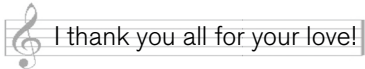
IMAGES	Page 30	2.11 national gallery of art <a href="http://www.francesmayesbooks.com/tag/john-klein/">http://www.francesmayesbooks.com/tag/john-klein/</a>
	Page 31	2.12 national gallery of art atrium <a href="http://www.house-design-coffee.com/I-M-Pei.html">http://www.house-design-coffee.com/I-M-Pei.html</a>
		2.13 national gallery of art tunnel <a href="http://www.connersmith.us.com/artists/leo-villareal/">http://www.connersmith.us.com/artists/leo-villareal/</a>
	Page 32	2.14 Jewish museum Berlin concept sketch <a href="http://daniel-libeskind.com/projects/chamber-works/drawings">http://daniel-libeskind.com/projects/chamber-works/drawings</a>
	Page 33	2.15 Jewish museum Berlin site map <a href="http://kberry.wordpress.ncsu.edu/">http://kberry.wordpress.ncsu.edu/</a>
	Page 36	2.16 Garden of Exile and Emigration <a href="http://kberry.wordpress.ncsu.edu/2012/11/13/4/">http://kberry.wordpress.ncsu.edu/2012/11/13/4/</a>
		2.17 Garden of Exile and Emigration <a href="https://www.youtube.com/watch?v=03Hp75b3e7I">https://www.youtube.com/watch?v=03Hp75b3e7I</a>
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	Page 37	2.20 Jewish museum Berlin "void" space <a href="https://www.youtube.com/watch?v=03Hp75b3e7I">https://www.youtube.com/watch?v=03Hp75b3e7I</a>
		2.21 open-mouthed iron plates <a href="https://www.youtube.com/watch?v=03Hp75b3e7I">https://www.youtube.com/watch?v=03Hp75b3e7I</a>
		2.22 open-mouthed iron plates <a href="https://www.youtube.com/watch?v=03Hp75b3e7I">https://www.youtube.com/watch?v=03Hp75b3e7I</a>

IMAGES	Page 37	2.23 open-mouthed iron plates <a href="https://www.youtube.com/watch?v=03Hp75b3e7l">https://www.youtube.com/watch?v=03Hp75b3e7l</a>
		2.24 open-mouthed iron plates <a href="https://www.youtube.com/watch?v=03Hp75b3e7l">https://www.youtube.com/watch?v=03Hp75b3e7l</a>
	Page 38	2.25 Vietnam Veterans Memorial Wall competition entry <a href="http://en.wikipedia.org/wiki/Maya_Lin">http://en.wikipedia.org/wiki/Maya_Lin</a>
	Page 40	2.26 Vietnam Veterans Memorial Wall <a href="http://www.flickr.com/photos/elkiev71/6956733302/">http://www.flickr.com/photos/elkiev71/6956733302/</a>
	Page 42	2.27 Vietnam Veterans Memorial Wall material <a href="http://www.flickr.com/photos/micha84/4535788537/in/photostream/">http://www.flickr.com/photos/micha84/4535788537/in/photostream/</a>
		2.28 Vietnam Veterans Memorial Wall material <a href="http://www.flickr.com/photos/micha84/4536422212/in/photostream/">http://www.flickr.com/photos/micha84/4536422212/in/photostream/</a>
	Page 46	3.1 Rocketts Landing history picture <a href="http://vintagerva.blogspot.com/2011/03/view-of-rocketts-landing-from-libby.html">http://vintagerva.blogspot.com/2011/03/view-of-rocketts-landing-from-libby.html</a>
	Page 91	6.1 GiBooth Chair <a href="http://www.jakobgomez.com/">http://www.jakobgomez.com/</a>
	Page 92	6.2 CCI Movable Display Cart <a href="http://www.jakobgomez.com/">http://www.jakobgomez.com/</a>
	Page 93	6.3 Lexington Mini Booth <a href="http://cola-red.com/details.php?prodId=85&amp;category=7">http://cola-red.com/details.php?prodId=85&amp;category=7</a>
	Page 107	7.1 sweet gum tree <a href="http://en.wikipedia.org/wiki/Liquidambar">http://en.wikipedia.org/wiki/Liquidambar</a>
		7.2 boxwood shrubs <a href="https://www.flickr.com/photos/portstone/6236254347/">https://www.flickr.com/photos/portstone/6236254347/</a>

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- Britta Bielak
- Max Brock
- Latonia Chavis
- Llewellyn Hensley
- Gordon McCormick
- Tyler Mitchell
- Jane Moss
- Michael Rader
- Michael Rosenthal-Mix
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